



BC

LABORATORIES, INC.

Work Order Number: 1703604

**Laboratory Documentation Requirements
For Data Validation of
Volatile Analysis**

**Prepared By
BC Laboratories**

For AMEC Environmental & Infrastructure

5023146096

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Case Narrative

Analyses Requested: 8260

Submission Number: 17-03604

Instrument ID: MS-V5

Model: HP5973/GC6890

Column Type: Rxi R-624 Sil MS 30m x 0.25mm ID, 1.4 μ m film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met except the recoveries for Bromomethane in 1702674-CCV1 and 1702721-CCV1 and the recovery for 2,2-Dichloropropane in 1702674-CCV1 were outside QC limits. Ending CCV criteria of fifty percent were met. Any compounds that were flagged, but not required, were not noted here.

Blanks: Method blanks were prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analyses were performed at the required frequency. All parameters for the required compounds were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy requirements were met except in batch B[B]1276 the matrix spike recoveries for n-Butylbenzene, sec-Butylbenzene and tert-Butylbenzene, the matrix spike duplicate recoveries for 1,3-Dichloropropane, 1,1,2,2-Tetrachloroethane and 1,1,2-Trichloroethane and the matrix spike and matrix spike duplicate recoveries for 1,2-Dibromomethane, Methyl t-butyl ether, Naphthalene, 1,2,3-Trichloropropane and t-Butyl alcohol were outside QC limits. All precision requirements were met. Any compounds that were flagged, but not required, were not noted here.

Notes: For samples 17-03604-04, 17-03604-05, 17-03604-06, 17-03604-08, 17-03604-09, 17-03604-10, 17-03604-12, 17-03604-19, 17-03604-23 and B[B]1276-MS1, the surrogate recoveries for 1,2-Dichloroethane-d4 were outside QC limits. For samples 17-03604-20, 17-03604-21, 17-03604-22 and 17-03604-23, the Sample IDs were corrected to match the Chain of Custody. Revised reports were generated and issued to the client.

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1703604 Page 1 of 6

17-03604

MMEC Group 8177 Sky Park Court San Diego, CA (858) 278-3800	SHIP TO: BC Laboratories 4190 Aliso Court Bakersfield, CA 93308 Attn: Lab Phantoms
Project Name: Alamedia Basewide	Project Contact: Name: Marcell (508) 839-3400 Phone Number: 03 ****
Project Number: 1622446098	Project Phase: Kro'st Olema
Project Manager:	

CHAIN OF CUSTODY

DATE: 20/01/2017

COC # COC1703604

PAGE: 1 OF 3

Sample Information										Methods for Analysis												
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MSMSD					VOCs (EPA 260B)					DRS Methods - AS 6 Co							
1	DUP09_170208	02/08/17 09:35	WG	FD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
2	AN03-16_170208	02/08/17 10:05	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
3	S11-TT-MW04B_170208	02/08/17 11:15	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
4	S11-TT-MW04C_170208	02/08/17 10:35	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
5	S11-TT-MW04D_170208	02/08/17 09:40	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
6	S11-TT-MW04E_170208	02/08/17 08:45	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
7	S21-TT-MW02A_170208	02/08/17 09:52	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
8	S21-TT-MW02B_170208	02/08/17 09:29	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
9	S21-TT-MW02C_170208	02/08/17 09:00	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10	S21-TT-MW02D_170208	02/08/17 08:34	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
11	S21-TT-MW02E_170208	02/08/17 08:05	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
12	S21-TT-MW03E_170208	02/08/17 10:51	WG	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sampler's Signature: <i>M. Sweenan / AFCL</i>										2-8-17	Time: 14:50	For Lab Use	Does COC match samples: Y or N					Comments: X=Analyze H=Hold Analysis Request				
Relinquished By/Attestation: <i>M. Sweenan / AFCL</i>										2-8-17	Time: 15:30	Broken Container: Y or N	Report DL/LOD/LOQ with Navy NIRIS valid values									
Received By: <i>David Bogen</i>										1-8-17	Time: 1:54C	COC seal intact: Y or N	VOC short list is Benzene & Ethylbenzene only									
Relinquished By/Attestation: <i>David Bogen</i>										2-8-17	Time: 18:30C	Other problems: Y or N	Major Cations are Na, K, Ca, Mg									
Received By: <i>David Bogen</i>										2/8/17	Time: 18:30C	Date contacted: _____ °C	NUMBER OF COOLERS SHIPPED:									
Relinquished By/Attestation: <i>David Bogen</i>										2/8/17	Time: 22:30	Date: _____ °C										
Received By (LAB): <i>David Bogen</i>										2/8/17	Time: 22:30											



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Chain of Custody and Cooler Receipt Form for 1703604 Page 2 of 6

SHIP TO:		
BC Laboratories 4100 Aliss Court Bakersfield, CA 93306		
Attn:		
Lab Phone#:		
Project Name: Alameda Basewide		
Project Number: sub2146046		
Project Manager: Kevin O'Reilly		

17-03604

CHAIN OF CUSTODY

Sample Information					
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MSMS#
1	S11-TT-MW03B_170208-19	02/08/17 13:35	WG	N	X
2	S11-TT-MW03C_170208-15	02/08/17 13:05	WG	N	X
3	S11-TT-MW03D_170208-20	02/08/17 12:25	WG	N	X
4	S11-TT-MW03E_170208-17	02/08/17 11:35	WG	N	X
5	S11-TT-MW04A_170208-06	02/08/17 12:15	WG	N	X
6	S11-TT-MW05D_170208-01	02/08/17 13:40	WG	N	X
7	S11-TT-MW05E_170208-00	02/08/17 12:55	WG	N	X
8	S21-TT-MW03A_170208-02	02/08/17 13:43	WG	N	X
9	S21-TT-MW03B_170208-20	02/08/17 11:51	WG	N	X
10	S21-TT-MW03C_170208-33	02/08/17 13:16	WG	N	X
11	S21-TT-MW03D_170208-02	02/08/17 11:18	WG	N	X
12	TB16_170208	02/08/17 12:15	WQ	TB	X

Sampler's Signature: *[Signature]*DATE: 2/08/17COC #: COC170208PAGE: 2 OF 3

Methods for Analysis					
RUSH					
TOTAL BOTTLES					
HOLD AS ARRIVED					
LAB					
FEDEX					
N/A					
Shipment Method:					
Weight Number:					
Comments: X=Analyze H=Hold Analysis Request					
Report DJ/LOD/LOQ with Navy NIRIS valid values					
VOC short list is Benzene & Ethylbenzene only					
Major Cations are Na, K, Ca, Mg					
NUMBER OF COOLERS SENT:					
For Lab Use					
Does COC match samples: Y or N					
Comments: Y or N					
Broken Container: Y or N					
COC seal intact: Y or N					
Other problems: Y or N					
WISDOT contacted: Y or N					
Date contacted: _____					
Cooler Temperature at receipt: _____ °C					
Date: <u>2/08/17</u> Time: <u>14:30</u>					
Date: <u>2/08/17</u> Time: <u>15:30</u>					
Date: <u>2/08/17</u> Time: <u>15:40</u>					
Date: <u>2/08/17</u> Time: <u>18:30</u>					
Date: <u>2/08/17</u> Time: <u>18:30</u>					
Date: <u>2/08/17</u> Time: <u>22:30</u>					
Date: <u>2/08/17</u> Time: <u>22:30</u>					
Relinquished By/Affiliation: <i>[Signature]</i>					
Received By: <i>[Signature]</i>					
Relinquished By/Affiliation: <i>[Signature]</i>					
Received By: <i>[Signature]</i>					
Relinquished By/Affiliation: <i>[Signature]</i>					
Received By (LAB): <i>[Signature]</i>					

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Chain of Custody and Cooler Receipt Form for 1703604 Page 3 of 6

Project Name:		Alameda Basewide	Project Contact:	Maria Martinez (503) 460-3400	Ship To:	Ames Foster Wheeler 9210 Sky Park Court, Suite 200 San Diego, CA 92123	Dispose Instructions:	LAB
Project Number:	402346000	Phone Number:	03 ****	Lab Prefix:		Salinity Method:	FEDEX	
Project Manager:	Kevin O'neill	Project Phone:		Waiver Number:		Hold At Analysis:	N/A	
Sample Information		Methods for Analysis						
No.	Sample ID	Date & Time Sampled	MainX	Sample Type	MSMSMS			
1	EE30_170208	02/08/17 14:10	25	WQ	X	VOCs (EPA 8260B)	Diss Methods - AS 6 Cu	
2	EE31_170208	02/08/17 14:20	26	WQ	X			
3	EE32_170208	02/08/17 14:30	27	WQ	X			
4	511-TT-MW03A_170208	02/08/17 14:15	28	WG	N			
5								
6								
7								
8								
9								
10								
11								
12								
Sample's Signature: <i>[Signature]</i>		Date: 2/8/17	Time: 14:10	For Lab Use				
Reinforced By/Affiliation: <i>Miles Sorenson (AFW)</i>		Date: 2/8/17	Time: 15:30	Does COC match samples:	Y or N			
Received By: <i>Miles Sorenson</i>		Date: 2/8/17	Time: 15:40	Broken Container:	Y or N			
Reinforced By/Affiliation: <i>Jacqueline Bogon</i>		Date: 2/8/17	Time: 18:30	COC seal intact:	Y or N			
Received By: <i>Jacqueline Bogon</i>		Date: 2/8/17	Time: 22:30	Other problems:	Y or N			
Reinforced By/Affiliation: <i>Jacqueline Bogon</i>		Date: 2/8/17	Time: 22:30	WSBOD contact:	Y or N			
Received By (Lab): <i>Jacqueline Bogon</i>		Date: 2/8/17	Time: 22:30	Data contacted:	Y or N			
				Cooler Temperature at receipt:	____ °C			
				NUMBER OF COOLERS SENT: _____				

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Chain of Custody and Cooler Receipt Form for 1703604 Page 4 of 6

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page	1	Of	43	
Submission #: 17-03604							<i>m 21A</i>				
SHIPPING INFORMATION					SHIPPING CONTAINER				FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>	W / S		
BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____					Other <input type="checkbox"/> (Specify) _____						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:											
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:								
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		All samples received? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		All samples containers intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97		Container: PE Blank		Thermometer ID: 207		Date/Time: 2/8 22:40			
Temperature: (A) 0.6 °C / (C) 0.9 °C								Analyst Init: 68P			
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES											
2oz Cr ⁶											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PtA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL	094	A1b1	A1b2	A1b3	A1b4	A1b5	A1b6	A1b7	A1b8	A1b9	
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/808											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz RPA 548											
QT RPA 549											
QT RPA 801SM											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											

Comments: _____

Sample Numbering Completed By: *JM*

A = Actual / C = Corrected

Date/Time: *2-9-12*

Rev 21 05/23/2016

IS:\WFD\Doc\WordPerfect\LAB DOCS\FORMS\184WRS\Rev 20

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Chain of Custody and Cooler Receipt Form for 1703604 Page 5 of 6

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page <u>7</u> Of <u>43</u> JUL 29 17		
Submission #: <u>17-03604</u>									
SHIPPING INFORMATION						SHIPPING CONTAINER		FREE LIQUID	
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/>		YES <input type="checkbox"/> NO <input type="checkbox"/>		W / S	
BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____						Other <input type="checkbox"/> (Specify) _____			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:									
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:						
All samples received? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>							
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.97</u>	Container: <u>PE Blank</u>	Thermometer ID: <u>207</u>	Date/Time <u>2/8 22:40</u>					
	Temperature: (A) <u>0.6</u> °C / (C) <u>0.9</u> °C			Analyst Init. <u>6SP</u>					
SAMPLE CONTAINERS	SAMPLE NUMBERS								
	1	2	3	4	5	6	7	8	9
QT PE UNPRES									
4oz / 8oz / 16oz PE UNPRES									
2oz Cr ⁻⁶									
QT INORGANIC CHEMICAL METALS									
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz									
PT CYANIDE									
PT NITROGEN FORMS									
PT TOTAL SULFIDE									
2oz NITRATE / NITRITE									
PT TOTAL ORGANIC CARBON									
PT CHEMICAL OXYGEN DEMAND									
PTA PHENOLICS									
40ml VOA VIAL TRAVEL BLANK									
40ml VOA VIAL <u>0.6</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>	<u>A/B/C</u>
QT EPA 1664									
PT ODOR									
RADIOLOGICAL									
BACTERIOLOGICAL									
40 ml VOA VIAL- 504									
QT EPA 508/608/8080									
QT EPA 515.1/8150									
QT EPA 525									
QT EPA 525 TRAVEL BLANK									
40ml EPA 547									
40ml EPA 531.1									
8oz EPA 548									
QT EPA 549									
QT EPA 8915M									
QT EPA 8270									
8oz / 16oz / 32oz AMBER									
8oz / 16oz / 32oz JAR									
SOIL SIEVE									
PCB VIAL									
PLASTIC BAG									
TEDLAR BAG									
FERROUS IRON									
ENCORE									
SMART KIT									
SUMMA CANISTER									
Comments: _____	JUL 29 17								
Sample Numbering Completed By: _____	Date/Time: <u>2-9-17</u> Rev 21 05/23/2016								
A = Actual / C = Corrected									

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1703604 Page 6 of 6

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page 3 Of 43 105-0917	
Submission #:	A-03604							
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/> W / S	
BC Lab Field Service <input checked="" type="checkbox"/>			Other <input type="checkbox"/> (Specify) _____			Other <input type="checkbox"/> (Specify) _____		
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____								
Custody Seals		Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____				
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97	Container: PE Blank	Thermometer ID: 207		Date/Time: 2/8 22:40		
		Temperature: (A) 0.6 °C / (C) 0.9 °C				Analyst Init: 68P		
SAMPLE CONTAINERS	SAMPLE NUMBERS							
	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8
QT PE UNPRES								
4oz / 8oz / 16oz PE UNPRES								
2oz Cr ⁶⁺								
QT INORGANIC CHEMICAL METALS								
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz						D	D	
PT CYANIDE								
PT NITROGEN FORMS								
PT TOTAL SULFIDE								
2oz NITRATE / NITRITE								
PT TOTAL ORGANIC CARBON								
PT CHEMICAL OXYGEN DEMAND								
PTA PHENOLICS								
40ml VOA VIAL TRAVEL BLANK	094			AB				
40ml VOA VIAL	094	ABC	ABC	ABC	ABC	ABC	ABC	
QT EPA 1664								
PT ODOR								
RADIOLOGICAL								
BACTERIOLOGICAL								
40 ml VOA VIAL- 504								
QT EPA 508608/3080								
QT EPA 515.1/8150								
QT EPA 525								
QT EPA 525 TRAVEL BLANK								
40ml EPA 547								
40ml EPA 531.1								
8oz KPA 548								
QT KPA 549								
QT KPA 8015M								
QT EPA 8270								
8oz / 16oz / 32oz AMBER								
8oz / 16oz / 32oz JAR								
SOIL SLEEVE								
PCB VIAL								
PLASTIC BAG								
TEDLAR BAG								
FERROUS IRON								
ENCORE								
SMART KIT								
SUMMA CANISTER								
Comments: _____								
Sample Numbering Completed By: _____	JDL Date/Time: 2-9-17							
A = Actual / C = Corrected								



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM

Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 1703604

Class: VOA

Method: EPA-8260B



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ANALYSES DATA PACKAGE COVER PAGE**EPA-8260B**

Laboratory: BC Laboratories

SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN

Project: Alameda

Client Sample Id:	Lab Sample Id:
DUP09_170208	<u>1703604-01</u>
DUP09_170208	<u>1703604-01RE1</u>
M03-16_170208	<u>1703604-02</u>
M03-16_170208	<u>1703604-02RE1</u>
S11-TT-MW04B_170208	<u>1703604-03</u>
S11-TT-MW04B_170208	<u>1703604-03RE1</u>
S11-TT-MW04C_170208	<u>1703604-04</u>
S11-TT-MW04D_170208	<u>1703604-05</u>
S11-TT-MW04E_170208	<u>1703604-06</u>
S21-TT-MW02A_170208	<u>1703604-07</u>
S21-TT-MW02A_170208	<u>1703604-07RE1</u>
S21-TT-MW02B_170208	<u>1703604-08</u>
S21-TT-MW02B_170208	<u>1703604-08RE1</u>
S21-TT-MW02C_170208	<u>1703604-09</u>
S21-TT-MW02D_170208	<u>1703604-10</u>
S21-TT-MW02E_170208	<u>1703604-11</u>
S21-TT-MW03E_170208	<u>1703604-12</u>
S11-TT-MW03B_170208	<u>1703604-13</u>
S11-TT-MW03C_170208	<u>1703604-14</u>
S11-TT-MW03D_170208	<u>1703604-15</u>
S11-TT-MW03E_170208	<u>1703604-16</u>
S11-TT-MW04A_170208	<u>1703604-17</u>
S11-TT-MW04A_170208	<u>1703604-17RE1</u>
S11-TT-MW05D_170208	<u>1703604-18</u>
S11-TT-MW05E_170208	<u>1703604-19</u>
S21-TT-MW03A_170208	<u>1703604-20</u>
S21-TT-MW03B_170208	<u>1703604-21</u>
S21-TT-MW03C_170208	<u>1703604-22</u>
S21-TT-MW03D_170208	<u>1703604-23</u>
TB16_170208	<u>1703604-24</u>
EB30_170208	<u>1703604-25</u>
EB31_170208	<u>1703604-26</u>
EB32_170208	<u>1703604-27</u>
S11-TT-MW03A_170208	<u>1703604-28</u>



Laboratories, Inc.

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AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron

Name: Sara Guron

Date: 03-13-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

METHOD DETECTION AND REPORTING LIMITS EPA-8260B

Laboratory: BC Laboratories

SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
Benzene	0.083	0.16	0.50	ug/L
Bromobenzene	0.13	0.16	0.50	ug/L
Bromochloromethane	0.24	0.30	1.0	ug/L
Bromodichloromethane	0.14	0.30	0.50	ug/L
Bromoform	0.27	0.30	0.60	ug/L
Bromomethane	0.25	0.25	0.60	ug/L
n-Butylbenzene	0.11	0.16	0.50	ug/L
sec-Butylbenzene	0.15	0.16	0.50	ug/L
tert-Butylbenzene	0.13	0.16	0.50	ug/L
Carbon tetrachloride	0.18	0.20	0.50	ug/L
Chlorobenzene	0.093	0.16	0.50	ug/L
Chloroethane	0.14	0.16	0.50	ug/L
Chloroform	0.12	0.16	0.50	ug/L
Chloromethane	0.14	0.16	0.50	ug/L
2-Chlorotoluene	0.20	0.20	0.50	ug/L
4-Chlorotoluene	0.15	0.16	0.50	ug/L
Dibromochloromethane	0.13	0.16	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.44	0.50	1.0	ug/L
1,2-Dibromoethane	0.16	0.16	0.50	ug/L
Dibromomethane	0.24	0.30	1.0	ug/L
1,2-Dichlorobenzene	0.072	0.16	0.50	ug/L
1,3-Dichlorobenzene	0.15	0.16	0.50	ug/L
1,4-Dichlorobenzene	0.062	0.16	0.50	ug/L
Dichlorodifluoromethane	0.099	0.16	0.50	ug/L
1,1-Dichloroethane	0.11	0.16	0.50	ug/L
1,2-Dichloroethane	0.17	0.20	0.50	ug/L
1,1-Dichloroethene	0.18	0.20	0.50	ug/L
cis-1,2-Dichloroethene	0.085	0.16	0.50	ug/L
trans-1,2-Dichloroethene	0.15	0.16	0.50	ug/L
1,2-Dichloropropane	0.13	0.16	0.50	ug/L



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

METHOD DETECTION AND REPORTING LIMITS**EPA-8260B**

Laboratory: BC Laboratories

SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
1,3-Dichloropropane	0.086	0.16	0.50	ug/L
2,2-Dichloropropane	0.13	0.16	0.50	ug/L
1,1-Dichloropropene	0.085	0.16	0.50	ug/L
cis-1,3-Dichloropropene	0.14	0.16	0.50	ug/L
trans-1,3-Dichloropropene	0.079	0.16	0.50	ug/L
Ethylbenzene	0.098	0.16	0.50	ug/L
Hexachlorobutadiene	0.17	0.20	0.50	ug/L
Isopropylbenzene	0.14	0.16	0.50	ug/L
p-Isopropyltoluene	0.12	0.16	0.50	ug/L
Methylene chloride	0.48	0.50	1.0	ug/L
Methyl t-butyl ether	0.11	0.16	0.50	ug/L
Naphthalene	0.36	0.40	0.50	ug/L
n-Propylbenzene	0.11	0.16	0.50	ug/L
Styrene	0.068	0.16	0.50	ug/L
1,1,1,2-Tetrachloroethane	0.18	0.20	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.17	0.20	0.50	ug/L
Tetrachloroethene	0.13	0.16	0.50	ug/L
Toluene	0.093	0.16	0.50	ug/L
1,2,3-Trichlorobenzene	0.16	0.16	0.50	ug/L
1,2,4-Trichlorobenzene	0.19	0.20	0.50	ug/L
1,1,1-Trichloroethane	0.11	0.16	0.50	ug/L
1,1,2-Trichloroethane	0.16	0.16	0.50	ug/L
Trichloroethene	0.085	0.16	0.50	ug/L
Trichlorofluoromethane	0.13	0.16	0.50	ug/L
1,2,3-Trichloropropane	0.24	0.33	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	0.15	0.16	0.50	ug/L
1,2,4-Trimethylbenzene	0.12	0.16	0.50	ug/L
1,3,5-Trimethylbenzene	0.12	0.16	0.50	ug/L
Vinyl chloride	0.12	0.16	0.50	ug/L
Total Xylenes	0.36	0.46	1.0	ug/L



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

METHOD DETECTION AND REPORTING LIMITS EPA-8260B

Laboratory: BC Laboratories

SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
Acetone	4.6	5.0	10	ug/L
Acetonitrile	5.5	6.0	10	ug/L
Allyl chloride	0.80	1.0	5.0	ug/L
t-Amyl Methyl ether	0.25	0.30	0.50	ug/L
Benzyl chloride	0.60	0.60	1.0	ug/L
t-Butyl alcohol	9.4	10	12	ug/L
Carbon disulfide	0.38	0.40	1.0	ug/L
Chloroprene	0.37	1.0	5.0	ug/L
Diisopropyl ether	0.23	0.30	0.50	ug/L
Ethyl t-butyl ether	0.18	0.20	0.50	ug/L
2-Hexanone	3.4	4.0	10	ug/L
Methyl ethyl ketone	2.5	3.0	10	ug/L
Methyl isobutyl ketone	2.1	3.0	10	ug/L
Vinyl acetate	1.8	6.0	20	ug/L
p- & m-Xylenes	0.28	0.30	0.50	ug/L
o-Xylene	0.082	0.16	0.50	ug/L



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

DUP09_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-01</u>
Sampled:	<u>02/08/17 09:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.92	0.18	0.20	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.83	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U



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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

DUP09_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-01</u>
Sampled:	<u>02/08/17 09:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

DUP09_170208

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1703604-01 File ID: 15FEB02.D
Sampled: 02/08/17 09:35 Prepared: 02/15/17 06:00 Analyzed: 02/15/17 06:31
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B[B1276 Sequence: 1702674 Calibration: 1702011 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.750	108	81 - 118	
Toluene-d8 (Surrogate)	10.000	10.330	103	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9100	99.1	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	176661	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	55925	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	231989	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

DUP09_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-01RE1</u>
Sampled:	<u>02/08/17 09:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
156-59-2	cis-1,2-Dichloroethene	5	88	0.42	0.80	2.5	D
79-01-6	Trichloroethene	5	110	0.42	0.80	2.5	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.970	110	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.5300	95.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.7800	97.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	198431	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	62633	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	263060	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

M03-16_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-02</u>
Sampled:	<u>02/08/17 10:05</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.71	0.18	0.20	0.50	
156-60-5	trans-1,2-Dichloroethene	1	1.1	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

M03-16_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-02</u>
Sampled:	<u>02/08/17 10:05</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	4.0	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**ORGANIC ANALYSIS DATA SHEET
EPA-8260B****M03-16_170208**

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1703604-02 File ID: 15FEB03.D
Sampled: 02/08/17 10:05 Prepared: 02/15/17 06:00 Analyzed: 02/15/17 06:54
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B[B1276 Sequence: 1702674 Calibration: 1702011 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.360	114	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6400	96.4	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.8100	98.1	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	194144	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	63892	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	263908	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

M03-16_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-02RE1</u>
Sampled:	<u>02/08/17 10:05</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
156-59-2	cis-1,2-Dichloroethene	5	120	0.42	0.80	2.5	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.900	109	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4300	94.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.8800	98.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	205858	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	64770	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	267655	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-03</u>
Sampled:	<u>02/08/17 11:15</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	1.0	0.18	0.20	0.50	
156-59-2	cis-1,2-Dichloroethene	1	17	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.34	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-03</u>
Sampled:	<u>02/08/17 11:15</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	2.1	0.16	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.41	0.12	0.16	0.50	J
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**ORGANIC ANALYSIS DATA SHEET
EPA-8260B****S11-TT-MW04B_170208**

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1703604-03 File ID: 15FEB04.D
Sampled: 02/08/17 11:15 Prepared: 02/15/17 06:00 Analyzed: 02/15/17 07:17
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B[B1276 Sequence: 1702674 Calibration: 1702011 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.410	114	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.9600	99.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9700	99.7	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	205252	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	70362	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	273349	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-03RE1</u>				
Sampled:	<u>02/08/17 11:15</u>	Prepared:	<u>02/15/17 06:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>	Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
79-01-6	Trichloroethene	10	670	0.85	1.6	5.0	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.010	110	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7100	97.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9900	99.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	199074	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	61763	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	263755	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-04</u>
Sampled:	<u>02/08/17 10:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	1.3	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-04</u>
Sampled:	<u>02/08/17 10:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.28	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-04</u>
Sampled:	<u>02/08/17 10:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.970	130	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.3900	93.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.8300	98.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	178385	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	58697	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	249530	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-05</u>
Sampled:	<u>02/08/17 09:40</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-05</u>				
Sampled:	<u>02/08/17 09:40</u>	Prepared:	<u>02/15/17 06:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
						Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-05</u>
Sampled:	<u>02/08/17 09:40</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.660	127	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.7500	97.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.140	101	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	204767	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	69100	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	272597	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-06</u>
Sampled:	<u>02/08/17 08:45</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-06</u>
Sampled:	<u>02/08/17 08:45</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.22	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-06</u>
Sampled:	<u>02/08/17 08:45</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.240	122	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.8300	98.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6000	96.0	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	207792	6.59	189110	6.58	
Chlorobenzene-d5 (IS)	72348	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	280835	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-07</u>
Sampled:	<u>02/08/17 09:52</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.65	0.083	0.16	0.50	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.98	0.18	0.20	0.50	
156-60-5	trans-1,2-Dichloroethene	1	3.4	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-07</u>				
Sampled:	<u>02/08/17 09:52</u>	Prepared:	<u>02/15/17 06:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
						Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	1.0	0.16	0.16	0.50	
79-01-6	Trichloroethene	1	11	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.61	0.12	0.16	0.50	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

S21-TT-MW02A_170208

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1703604-07 File ID: 15FEB08.D
Sampled: 02/08/17 09:52 Prepared: 02/15/17 06:00 Analyzed: 02/15/17 08:50
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B[B1276 Sequence: 1702674 Calibration: 1702011 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.130	111	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8900	98.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.610	106	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	204637	6.59	189110	6.58	
Chlorobenzene-d5 (IS)	64065	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	257952	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-07RE1</u>
Sampled:	<u>02/08/17 09:52</u>	Prepared:	<u>02/16/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
156-59-2	cis-1,2-Dichloroethene	5	230	0.42	0.80	2.5	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.370	104	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4000	94.0	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9900	99.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	201223	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	61656	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	268312	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-08</u>
Sampled:	<u>02/08/17 09:29</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.84	0.18	0.20	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.75	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-08</u>
Sampled:	<u>02/08/17 09:29</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

S21-TT-MW02B_170208

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1703604-08 File ID: 15FEB09.D
Sampled: 02/08/17 09:29 Prepared: 02/15/17 06:00 Analyzed: 02/15/17 09:13
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B[B1276 Sequence: 1702674 Calibration: 1702011 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.980	120	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.8500	98.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.280	103	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	193455	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	65146	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	259920	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-08RE1</u>				
Sampled:	<u>02/08/17 09:29</u>	Prepared:	<u>02/15/17 06:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>	Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
156-59-2	cis-1,2-Dichloroethene	5	87	0.42	0.80	2.5	D
79-01-6	Trichloroethene	5	96	0.42	0.80	2.5	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.570	106	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7100	97.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6500	96.5	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	199818	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	63639	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	266569	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-09</u>
Sampled:	<u>02/08/17 09:00</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-09</u>
Sampled:	<u>02/08/17 09:00</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	2.8	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-09</u>
Sampled:	<u>02/08/17 09:00</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.150	122	81 - 118	*
Toluene-d8 (Surrogate)	10.000	10.050	100	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.8600	98.6	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	200061	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	68960	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	269978	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-10</u>
Sampled:	<u>02/08/17 08:34</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-10</u>
Sampled:	<u>02/08/17 08:34</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	1.5	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-10</u>
Sampled:	<u>02/08/17 08:34</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.990	120	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.5500	95.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.290	103	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	203749	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	67103	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	277794	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-11</u>
Sampled:	<u>02/08/17 08:05</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-11</u>
Sampled:	<u>02/08/17 08:05</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



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9210 Sky Park Court #200
San Diego, CA 92123

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Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW02E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-11</u>
Sampled:	<u>02/08/17 08:05</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.900	109	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7000	97.0	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5200	95.2	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	198900	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	62818	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	269597	7.39	249293	7.39	

* Values outside of QC limits



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-12</u>
Sampled:	<u>02/08/17 10:51</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
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Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-12</u>
Sampled:	<u>02/08/17 10:51</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
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Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-12</u>
Sampled:	<u>02/08/17 10:51</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.970	130	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.9600	99.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.400	104	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	196635	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	66736	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	262410	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-13</u>
Sampled:	<u>02/08/17 13:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.18	0.11	0.16	0.50	J
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	14	0.18	0.20	0.50	
156-59-2	cis-1,2-Dichloroethene	1	0.95	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-13</u>
Sampled:	<u>02/08/17 13:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.31	0.11	0.16	0.50	J
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	35	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	29	4.6	5.0	10	
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	1.4	0.23	0.30	0.50	
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-13</u>
Sampled:	<u>02/08/17 13:35</u>	Prepared:	<u>02/15/17 06:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.700	107	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.5400	95.4	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6800	96.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	196317	6.58	189110	6.58	
Chlorobenzene-d5 (IS)	59906	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	250428	7.39	249293	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-14</u>
Sampled:	<u>02/08/17 13:05</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	4.0	0.18	0.20	0.50	
156-59-2	cis-1,2-Dichloroethene	1	1.4	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.25	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-14</u>				
Sampled:	<u>02/08/17 13:05</u>	Prepared:	<u>02/16/17 07:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
					Instrument:	<u>MS-V5</u>	

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	32	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.22	0.12	0.16	0.50	J
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-14</u>
Sampled:	<u>02/08/17 13:05</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.870	109	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.5200	95.2	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6000	96.0	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	181164	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	59962	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	251300	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-15</u>
Sampled:	<u>02/08/17 12:25</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-15</u>				
Sampled:	<u>02/08/17 12:25</u>	Prepared:	<u>02/16/17 07:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
					Instrument:	<u>MS-V5</u>	

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-15</u>
Sampled:	<u>02/08/17 12:25</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.880	109	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.3300	93.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9300	99.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	202392	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	64246	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	281010	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-16</u>
Sampled:	<u>02/08/17 11:35</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-16</u>				
Sampled:	<u>02/08/17 11:35</u>	Prepared:	<u>02/16/17 07:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
					Instrument:	<u>MS-V5</u>	

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-16</u>
Sampled:	<u>02/08/17 11:35</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.180	112	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6900	96.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.2000	92.0	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	179769	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	61252	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	248503	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-17</u>
Sampled:	<u>02/08/17 12:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	1.1	0.18	0.20	0.50	
156-60-5	trans-1,2-Dichloroethene	1	1.8	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-17</u>
Sampled:	<u>02/08/17 12:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	44	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	14	0.12	0.16	0.50	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

S11-TT-MW04A_170208

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1703604-17 File ID: 16FEB12.D
Sampled: 02/08/17 12:15 Prepared: 02/16/17 07:00 Analyzed: 02/16/17 11:41
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B[B1418 Sequence: 1702721 Calibration: 1702011 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.100	111	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8100	98.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.7300	97.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	204857	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	66722	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	267231	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW04A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-17RE1</u>
Sampled:	<u>02/08/17 12:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
156-59-2	cis-1,2-Dichloroethene	5	240	0.42	0.80	2.5	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.300	103	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6800	96.8	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	8.9900	89.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	213697	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	68470	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	287760	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW05D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-18</u>
Sampled:	<u>02/08/17 13:40</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW05D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-18</u>				
Sampled:	<u>02/08/17 13:40</u>	Prepared:	<u>02/16/17 07:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
					Instrument:	<u>MS-V5</u>	

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW05D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-18</u>
Sampled:	<u>02/08/17 13:40</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.650	116	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4900	94.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.290	103	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	208229	6.59	192128	6.58	
Chlorobenzene-d5 (IS)	66994	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	285485	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW05E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-19</u>
Sampled:	<u>02/08/17 12:55</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM

Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

S11-TT-MW05E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-19</u>
Sampled:	<u>02/08/17 12:55</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW05E_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-19</u>
Sampled:	<u>02/08/17 12:55</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.010	120	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.7000	97.0	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.7800	97.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	213946	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	70190	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	277835	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-20</u>
Sampled:	<u>02/08/17 13:43</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
		Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.49	0.18	0.20	0.50	J
156-59-2	cis-1,2-Dichloroethene	1	94	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	1.5	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda

Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-20</u>
Sampled:	<u>02/08/17 13:43</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
		Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.29	0.16	0.16	0.50	J
79-01-6	Trichloroethene	1	0.47	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.25	0.12	0.16	0.50	J
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-20</u>
Sampled:	<u>02/08/17 13:43</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.840	118	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8700	98.7	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6600	96.6	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	178465	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	60556	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	243000	7.39	249050	7.39	

* Values outside of QC limits



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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM

Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

S21-TT-MW03B_170208

Laboratory:	<u>BC Laboratories</u>		SDG:	<u>1703604</u>			
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>		Project:	<u>Alameda</u>			
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-21</u>	File ID:	<u>16FEB16.D</u>		
Sampled:	<u>02/08/17 11:51</u>	Prepared:	<u>02/16/17 07:00</u>	Analyzed:	<u>02/16/17 13:14</u>		
Solids:			Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-21</u>
Sampled:	<u>02/08/17 11:51</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.29	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03B_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-21</u>
Sampled:	<u>02/08/17 11:51</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.050	100	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.9000	99.0	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.1900	91.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	200108	6.59	192128	6.58	
Chlorobenzene-d5 (IS)	62996	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	263085	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-22</u>
Sampled:	<u>02/08/17 13:16</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-22</u>				
Sampled:	<u>02/08/17 13:16</u>	Prepared:	<u>02/16/17 07:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
					Instrument:	<u>MS-V5</u>	

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03C_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-22</u>
Sampled:	<u>02/08/17 13:16</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.520	115	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7500	97.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.8500	98.5	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	173880	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	59552	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	237785	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-23</u>
Sampled:	<u>02/08/17 11:18</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-23</u>
Sampled:	<u>02/08/17 11:18</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S21-TT-MW03D_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-23</u>
Sampled:	<u>02/08/17 11:18</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	12.440	124	81 - 118	*
Toluene-d8 (Surrogate)	10.000	9.6300	96.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.3100	93.1	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	195849	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	70798	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	275108	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

TB16_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-24</u>
Sampled:	<u>02/08/17 12:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

TB16_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-24</u>
Sampled:	<u>02/08/17 12:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
		Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

TB16_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-24</u>
Sampled:	<u>02/08/17 12:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.090	101	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8800	98.8	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6700	96.7	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	184643	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	57313	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	241363	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB30_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-25</u>
Sampled:	<u>02/08/17 14:10</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB30_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-25</u>
Sampled:	<u>02/08/17 14:10</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB30_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-25</u>
Sampled:	<u>02/08/17 14:10</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.300	103	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4300	94.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.4600	94.6	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	221480	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	68879	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	286067	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB31_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-26</u>
Sampled:	<u>02/08/17 14:20</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB31_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-26</u>
Sampled:	<u>02/08/17 14:20</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB31_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-26</u>
Sampled:	<u>02/08/17 14:20</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.320	103	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6400	96.4	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6800	96.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	221950	6.59	192128	6.58	
Chlorobenzene-d5 (IS)	68231	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	292678	7.39	249050	7.39	

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB32_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-27</u>
Sampled:	<u>02/08/17 14:30</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



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Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB32_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-27</u>
Sampled:	<u>02/08/17 14:30</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



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EB32_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-27</u>
Sampled:	<u>02/08/17 14:30</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.470	105	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7100	97.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9900	99.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	221422	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	68601	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	287277	7.39	249050	7.39	

* Values outside of QC limits



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Project Number: 5023146096

Project Manager: Kelli Miller

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

S11-TT-MW03A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>					
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-28</u>		File ID:	<u>16FEB30.D</u>		
Sampled:	<u>02/08/17 14:15</u>	Prepared:	<u>02/16/17 07:00</u>		Analyzed:	<u>02/16/17 18:38</u>		
Solids:		Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>		
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	1.2	0.18	0.20	0.50		
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>				
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-28</u>				
Sampled:	<u>02/08/17 14:15</u>	Prepared:	<u>02/16/17 07:00</u>				
Solids:		Preparation:	<u>EPA 5030 Water MS</u>				
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>	Calibration:	<u>1702011</u>	Initial/Final:	<u>25 ml / 25 ml</u>
					Instrument:	<u>MS-V5</u>	

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	2.9	0.11	0.16	0.50	
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.49	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	15	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

S11-TT-MW03A_170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1703604-28</u>
Sampled:	<u>02/08/17 14:15</u>	Prepared:	<u>02/16/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
		Calibration:	<u>1702011</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.000	110	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.2900	92.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.2900	92.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	210072	6.58	192128	6.58	
Chlorobenzene-d5 (IS)	69901	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	281522	7.39	249050	7.39	

* Values outside of QC limits



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PREPARATION BATCH SUMMARY

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Batch: B[B1276 Batch Matrix: Water Preparation: EPA 5030 Water MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
DUP09_170208	1703604-01	15FEB02.D	02/15/17 06:00	Full SAP LIST
DUP09_170208	1703604-01RE1	15FEB12.D	02/15/17 06:00	Full SAP LIST
M03-16_170208	1703604-02	15FEB03.D	02/15/17 06:00	Full SAP LIST
M03-16_170208	1703604-02RE1	15FEB13.D	02/15/17 06:00	Full SAP LIST
S11-TT-MW04B_170208	1703604-03	15FEB04.D	02/15/17 06:00	Full SAP LIST
S11-TT-MW04B_170208	1703604-03RE1	15FEB19.D	02/15/17 06:00	Full SAP LIST
S11-TT-MW04C_170208	1703604-04	15FEB14.D	02/15/17 06:00	Full SAP LIST
S11-TT-MW04D_170208	1703604-05	15FEB06.D	02/15/17 06:00	Full SAP LIST
S11-TT-MW04E_170208	1703604-06	15FEB07.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW02A_170208	1703604-07	15FEB08.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW02A_170208	1703604-07RE1	16FEB20.D	02/16/17 06:00	Full SAP LIST
S21-TT-MW02B_170208	1703604-08	15FEB09.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW02B_170208	1703604-08RE1	15FEB21.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW02C_170208	1703604-09	15FEB15.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW02D_170208	1703604-10	15FEB11.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW02E_170208	1703604-11	15FEB16.D	02/15/17 06:00	Full SAP LIST
S21-TT-MW03E_170208	1703604-12	15FEB17.D	02/15/17 06:00	Full SAP LIST
S11-TT-MW03B_170208	1703604-13	15FEB18.D	02/15/17 06:00	Full SAP LIST
Blank	B[B1276-BLK1	15FEB01.D	02/15/17 06:00	
LCS	B[B1276-BS1	15FEB22.D	02/15/17 06:00	
S11-TT-MW04E_170208	B[B1276-MS1	15FEB23.D	02/15/17 06:00	
S11-TT-MW04E_170208	B[B1276-MSD1	15FEB24.D	02/15/17 06:00	



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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

PREPARATION BATCH SUMMARY**EPA-8260B**

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Batch: B[B1418 Batch Matrix: Water Preparation: EPA 5030 Water MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
S11-TT-MW03C_170208	1703604-14	16FEB09.D	02/16/17 07:00	Full SAP LIST
S11-TT-MW03D_170208	1703604-15	16FEB10.D	02/16/17 07:00	Full SAP LIST
S11-TT-MW03E_170208	1703604-16	16FEB11.D	02/16/17 07:00	Full SAP LIST
S11-TT-MW04A_170208	1703604-17	16FEB12.D	02/16/17 07:00	Full SAP LIST
S11-TT-MW04A_170208	1703604-17RE1	16FEB26.D	02/16/17 07:00	Added 2/17/2017 by JMS
S11-TT-MW05D_170208	1703604-18	16FEB13.D	02/16/17 07:00	Full SAP LIST
S11-TT-MW05E_170208	1703604-19	16FEB14.D	02/16/17 07:00	Full SAP LIST
S21-TT-MW03A_170208	1703604-20	16FEB15.D	02/16/17 07:00	Full SAP LIST
S21-TT-MW03B_170208	1703604-21	16FEB16.D	02/16/17 07:00	Full SAP LIST
S21-TT-MW03C_170208	1703604-22	16FEB17.D	02/16/17 07:00	Full SAP LIST
S21-TT-MW03D_170208	1703604-23	16FEB18.D	02/16/17 07:00	Full SAP LIST
TB16_170208	1703604-24	16FEB19.D	02/16/17 07:00	Full SAP LIST
EB30_170208	1703604-25	16FEB27.D	02/16/17 07:00	Full SAP LIST
EB31_170208	1703604-26	16FEB28.D	02/16/17 07:00	Full SAP LIST
EB32_170208	1703604-27	16FEB29.D	02/16/17 07:00	Full SAP LIST
S11-TT-MW03A_170208	1703604-28	16FEB30.D	02/16/17 07:00	Full SAP LIST
Blank	B[B1418-BLK1	16FEB08.D	02/16/17 07:00	
LCS	B[B1418-BS1	16FEB22.D	02/16/17 07:00	
S11-TT-MW03D_170208	B[B1418-MS1	16FEB23.D	02/16/17 07:00	
S11-TT-MW03D_170208	B[B1418-MSD1	16FEB24.D	02/16/17 07:00	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[B1276-BLK1</u>
Prepared:	<u>02/15/17 06:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>02/15/17 06:08</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
			Calibration: <u>1702011</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	0.16	0.099	0.16	0.50	U



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METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[B1276-BLK1</u>
Prepared:	<u>02/15/17 06:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>02/15/17 06:08</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
			Calibration: <u>1702011</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
75-34-3	1,1-Dichloroethane	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.20	0.19	0.20	0.50	U



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METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[B1276-BLK1</u>
Prepared:	<u>02/15/17 06:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>02/15/17 06:08</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[B1276</u>	Sequence:	<u>1702674</u>
			Calibration: <u>1702011</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-55-6	1,1,1-Trichloroethane	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	10	9.4	10	15	U
75-15-0	Carbon disulfide	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	9.9300	99.3	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.3900	93.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.2300	92.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	205452	6.59	189110	6.58	



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METHOD BLANK DATA SHEET EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[B1276-BLK1 File ID: 15FEB01.D
Prepared: 02/15/17 06:00 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Analyzed: 02/15/17 06:08 Instrument: MS-V5
Batch: B[B1276 Sequence: 1702674 Calibration: 1702011

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Chlorobenzene-d5 (IS)	63140	9.62	58863	9.62	
1,4-Difluorobenzene (IS)	266657	7.39	249293	7.39	



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METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[B1418-BLK1</u>
Prepared:	<u>02/16/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>02/16/17 10:08</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
			Calibration: <u>1702011</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	0.16	0.099	0.16	0.50	U



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METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[B1418-BLK1]</u>
Prepared:	<u>02/16/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>02/16/17 10:08</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
			Calibration: <u>1702011</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
75-34-3	1,1-Dichloroethane	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.20	0.19	0.20	0.50	U



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METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[B1418-BLK1</u>
Prepared:	<u>02/16/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>02/16/17 10:08</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[B1418</u>	Sequence:	<u>1702721</u>
			Calibration: <u>1702011</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-55-6	1,1,1-Trichloroethane	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	10	9.4	10	15	U
75-15-0	Carbon disulfide	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	9.7800	97.8	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4600	94.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.1700	91.7	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	203668	6.58	192128	6.58	



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Project: Alameda
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Project Manager: Kelli Miller

METHOD BLANK DATA SHEET EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[B1418-BLK1 File ID: 16FEB08.D
Prepared: 02/16/17 07:00 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Analyzed: 02/16/17 10:08 Instrument: MS-V5
Batch: B[B1418 Sequence: 1702721 Calibration: 1702011

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Chlorobenzene-d5 (IS)	63580	9.62	61975	9.62	
1,4-Difluorobenzene (IS)	269967	7.39	249050	7.39	



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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW04E 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-MS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number: <u>1703604-06</u>			

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Benzene	25.000	ND	22.800	91.2	79 - 120
Bromobenzene	25.000	ND	23.780	95.1	80 - 120
Bromoform	25.000	ND	27.850	111	78 - 123
Bromochloromethane	25.000	ND	27.180	109	79 - 125
Bromodichloromethane	25.000	ND	29.320	117	66 - 130
Bromomethane	25.000	ND	21.500	86.0	53 - 141
n-Butylbenzene	25.000	ND	18.660	74.6 *	75 - 128
sec-Butylbenzene	25.000	ND	18.500	74.0 *	77 - 126
tert-Butylbenzene	25.000	ND	19.480	77.9 *	78 - 124
Chlorobenzene	25.000	ND	23.740	95.0	82 - 118
Chloroethane	25.000	ND	25.740	103	72 - 136
Chloroform	25.000	ND	24.180	96.7	60 - 138
Chloromethane	25.000	ND	24.460	97.8	79 - 124
Chlorotoluene	25.000	ND	24.830	99.3	50 - 139
Dibromochloromethane	25.000	ND	21.830	87.3	79 - 122
Dibromomethane	25.000	ND	22.010	88.0	78 - 122
1,2-Dibromo-3-chloropropane	25.000	ND	30.160	121	74 - 126
1,2-Dibromoethane	25.000	ND	26.970	108	62 - 128
1,2-Dichlorobenzene	25.000	ND	30.450	122 *	77 - 121
1,3-Dichlorobenzene	25.000	ND	27.000	108	79 - 123
1,4-Dichlorobenzene	25.000	ND	23.640	94.6	80 - 119
Dichlorodifluoromethane	25.000	ND	21.360	85.4	80 - 119
Dichlorofluoromethane	25.000	ND	23.220	92.9	79 - 118
1,1-Dichloroethane	25.000	ND	23.100	92.4	32 - 152
			22.070	88.3	77 - 125



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW04E 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-MS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number: <u>1703604-06</u>			

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,2-Dichloroethane	25.000	ND	28.630	115	73 - 128
1,1-Dichloroethene	25.000	ND	24.650	98.6	71 - 131
cis-1,2-Dichloroethene	25.000	ND	24.800	99.2	78 - 123
trans-1,2-Dichloroethene	25.000	ND	24.450	97.8	75 - 124
1,2-Dichloropropane	25.000	ND	24.430	97.7	78 - 122
1,3-Dichloropropane	25.000	ND	29.190	117	80 - 119
2,2-Dichloropropane	25.000	ND	24.790	99.2	60 - 139
1,1-Dichloropropene	25.000	ND	23.850	95.4	79 - 125
cis-1,3-Dichloropropene	25.000	ND	26.440	106	75 - 124
trans-1,3-Dichloropropene	25.000	ND	29.430	118	73 - 127
Ethylbenzene	25.000	ND	22.280	89.1	79 - 121
Hexachlorobutadiene	25.000	ND	20.000	80.0	66 - 134
Isopropylbenzene	25.000	ND	19.530	78.1	72 - 131
p-Isopropyltoluene	25.000	ND	19.440	77.8	77 - 127
Methylene chloride	25.000	ND	26.600	106	74 - 124
Methyl t-butyl ether	25.000	ND	33.590	134 *	71 - 124
Naphthalene	25.000	ND	33.680	135 *	61 - 128
n-Propylbenzene	25.000	ND	19.140	76.6	76 - 126
Styrene	25.000	ND	23.950	95.8	78 - 123
1,1,1,2-Tetrachloroethane	25.000	ND	23.510	94.0	78 - 124
1,1,2,2-Tetrachloroethane	25.000	ND	28.110	112	71 - 121
Tetrachloroethene	25.000	ND	23.150	92.6	74 - 129
Toluene	25.000	ND	23.780	95.1	80 - 121
1,2,3-Trichlorobenzene	25.000	ND	26.590	106	69 - 129
1,2,4-Trichlorobenzene	25.000	ND	24.350	97.4	69 - 130



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW04E 170208

Laboratory: BC Laboratories SDG: 1703604
 Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[B1276 Laboratory ID: B[B1276-MS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1703604-06

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1-Trichloroethane	25.000	ND	24.900	99.6	74 - 131
1,1,2-Trichloroethane	25.000	ND	29.070	116	80 - 119
Trichloroethene	25.000	0.22000	25.200	99.9	79 - 123
Trichlorofluoromethane	25.000	ND	24.660	98.6	65 - 141
1,2,3-Trichloropropane	25.000	ND	32.910	132 *	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	ND	19.960	79.8	70 - 136
1,2,4-Trimethylbenzene	25.000	ND	20.600	82.4	76 - 124
1,3,5-Trimethylbenzene	25.000	ND	19.540	78.2	75 - 124
Vinyl chloride	25.000	ND	26.510	106	58 - 137
Total Xylenes	75.000	ND	66.480	88.6	79 - 121
Acetone	320.00	ND	350.31	109	39 - 160
Acetonitrile	160.00	ND	227.05	142	50 - 142
Allyl chloride	32.000	ND	31.150	97.3	68 - 130
t-Amyl Methyl ether	16.000	ND	17.700	111	68 - 128
Benzyl chloride	32.000	ND	39.730	124	42 - 138
t-Butyl alcohol	800.00	ND	1088.3	136 *	68 - 129
Carbon disulfide	32.000	ND	30.950	96.7	64 - 133
Chloroprene	32.000	ND	31.510	98.5	65 - 135
Diisopropyl ether	16.000	ND	18.140	113	67 - 128
Ethyl t-butyl ether	16.000	ND	15.680	98.0	70 - 127
2-Hexanone	320.00	ND	388.54	121	57 - 139
Methyl ethyl ketone	160.00	ND	167.78	105	56 - 143
Methyl isobutyl ketone	160.00	ND	189.12	118	67 - 130
Vinyl acetate	160.00	ND	156.36	97.7	54 - 146



AMEC Environmental & Infrastructure
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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW04E 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1703604-06</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Benzene	25.000	23.830	95.3	4.42	30	79 - 120
Bromobenzene	25.000	25.050	100	5.20	30	80 - 120
Bromochloromethane	25.000	28.460	114	2.17	30	78 - 123
Bromodichloromethane	25.000	27.660	111	1.75	30	79 - 125
Bromoform	25.000	30.160	121	2.82	30	66 - 130
Bromomethane	25.000	23.170	92.7	7.48	30	53 - 141
n-Butylbenzene	25.000	19.930	79.7	6.58	30	75 - 128
sec-Butylbenzene	25.000	19.260	77.0	4.03	30	77 - 126
tert-Butylbenzene	25.000	20.570	82.3	5.44	30	78 - 124
Carbon tetrachloride	25.000	26.540	106	3.06	30	72 - 136
Chlorobenzene	25.000	24.720	98.9	4.04	30	82 - 118
Chloroethane	25.000	25.020	100	3.41	30	60 - 138
Chloroform	25.000	25.060	100	2.42	30	79 - 124
Chloromethane	25.000	25.570	102	2.94	30	50 - 139
2-Chlorotoluene	25.000	23.250	93.0	6.30	30	79 - 122
4-Chlorotoluene	25.000	22.580	90.3	2.56	30	78 - 122
Dibromochloromethane	25.000	30.850	123	2.26	30	74 - 126
1,2-Dibromo-3-chloropropane	25.000	29.250	117	8.11	30	62 - 128
1,2-Dibromoethane	25.000	31.080	124 *	2.05	30	77 - 121
Dibromomethane	25.000	27.450	110	1.65	30	79 - 123
1,2-Dichlorobenzene	25.000	25.110	100	6.03	30	80 - 119
1,3-Dichlorobenzene	25.000	22.400	89.6	4.75	30	80 - 119
1,4-Dichlorobenzene	25.000	23.520	94.1	1.28	30	79 - 118
Dichlorodifluoromethane	25.000	24.590	98.4	6.25	30	32 - 152
1,1-Dichloroethane	25.000	22.770	91.1	3.12	30	77 - 125
1,2-Dichloroethane	25.000	28.930	116	1.04	30	73 - 128



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
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Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW04E 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1703604-06</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	25.000	25.830	103	4.68	30	71 - 131
cis-1,2-Dichloroethene	25.000	25.110	100	1.24	30	78 - 123
trans-1,2-Dichloroethene	25.000	24.540	98.2	0.367	30	75 - 124
1,2-Dichloropropane	25.000	25.090	100	2.67	30	78 - 122
1,3-Dichloropropane	25.000	30.920	124 *	5.76	30	80 - 119
2,2-Dichloropropane	25.000	25.350	101	2.23	30	60 - 139
1,1-Dichloropropene	25.000	24.740	99.0	3.66	30	79 - 125
cis-1,3-Dichloropropene	25.000	27.250	109	3.02	30	75 - 124
trans-1,3-Dichloropropene	25.000	29.640	119	0.711	30	73 - 127
Ethylbenzene	25.000	23.310	93.2	4.52	30	79 - 121
Hexachlorobutadiene	25.000	20.140	80.6	0.698	30	66 - 134
Isopropylbenzene	25.000	20.810	83.2	6.35	30	72 - 131
p-Isopropyltoluene	25.000	20.050	80.2	3.09	30	77 - 127
Methylene chloride	25.000	26.530	106	0.264	30	74 - 124
Methyl t-butyl ether	25.000	33.930	136 *	1.01	30	71 - 124
Naphthalene	25.000	37.280	149 *	10.1	30	61 - 128
n-Propylbenzene	25.000	21.090	84.4	9.69	30	76 - 126
Styrene	25.000	24.850	99.4	3.69	30	78 - 123
1,1,1,2-Tetrachloroethane	25.000	24.640	98.6	4.69	30	78 - 124
1,1,2,2-Tetrachloroethane	25.000	31.280	125 *	10.7	30	71 - 121
Tetrachloroethene	25.000	24.550	98.2	5.87	30	74 - 129
Toluene	25.000	24.490	98.0	2.94	30	80 - 121
1,2,3-Trichlorobenzene	25.000	28.560	114	7.14	30	69 - 129
1,2,4-Trichlorobenzene	25.000	25.580	102	4.93	30	69 - 130
1,1,1-Trichloroethane	25.000	25.620	102	2.85	30	74 - 131
1,1,2-Trichloroethane	25.000	31.520	126 *	8.09	30	80 - 119



AMEC Environmental & Infrastructure
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Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW04E 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1703604-06</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Trichloroethene	25.000	25.620	102	1.65	30	79 - 123
Trichlorofluoromethane	25.000	25.130	101	1.89	30	65 - 141
1,2,3-Trichloropropane	25.000	36.610	146 *	10.6	30	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	22.060	88.2	10.0	30	70 - 136
1,2,4-Trimethylbenzene	25.000	22.010	88.0	6.62	30	76 - 124
1,3,5-Trimethylbenzene	25.000	20.940	83.8	6.92	30	75 - 124
Vinyl chloride	25.000	27.950	112	5.29	30	58 - 137
Total Xylenes	75.000	70.190	93.6	5.43	30	79 - 121
Acetone	320.00	407.07	127	15.0	30	39 - 160
Acetonitrile	160.00	251.77	157 *	10.3	30	50 - 142
Allyl chloride	32.000	32.140	100	3.13	30	68 - 130
t-Amyl Methyl ether	16.000	19.950	125	12.0	30	68 - 128
Benzyl chloride	32.000	41.060	128	3.29	30	42 - 138
t-Butyl alcohol	800.00	1263.3	158 *	14.9	30	68 - 129
Carbon disulfide	32.000	32.450	101	4.73	30	64 - 133
Chloroprene	32.000	32.930	103	4.41	30	65 - 135
Diisopropyl ether	16.000	19.830	124	8.90	30	67 - 128
Ethyl t-butyl ether	16.000	17.690	111	12.0	30	70 - 127
2-Hexanone	320.00	476.43	149 *	20.3	30	57 - 139
Methyl ethyl ketone	160.00	191.46	120	13.2	30	56 - 143
Methyl isobutyl ketone	160.00	215.00	134 *	12.8	30	67 - 130
Vinyl acetate	160.00	175.48	110	11.5	30	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW03D 170208

Laboratory: BC Laboratories SDG: 1703604
 Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[B1418 Laboratory ID: B[B1418-MS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1703604-15

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Benzene	25.000	ND	21.170	84.7	79 - 120
Bromobenzene	25.000	ND	23.310	93.2	80 - 120
Bromochloromethane	25.000	ND	24.750	99.0	78 - 123
Bromodichloromethane	25.000	ND	24.240	97.0	79 - 125
Bromoform	25.000	ND	24.620	98.5	66 - 130
Bromomethane	25.000	ND	19.380	77.5	53 - 141
n-Butylbenzene	25.000	ND	21.940	87.8	75 - 128
sec-Butylbenzene	25.000	ND	19.840	79.4	77 - 126
tert-Butylbenzene	25.000	ND	21.360	85.4	78 - 124
Carbon tetrachloride	25.000	ND	24.900	99.6	72 - 136
Chlorobenzene	25.000	ND	23.450	93.8	82 - 118
Chloroethane	25.000	ND	21.690	86.8	60 - 138
Chloroform	25.000	ND	22.860	91.4	79 - 124
Chloromethane	25.000	ND	24.730	98.9	50 - 139
2-Chlorotoluene	25.000	ND	22.790	91.2	79 - 122
4-Chlorotoluene	25.000	ND	22.450	89.8	78 - 122
Dibromochloromethane	25.000	ND	25.190	101	74 - 126
1,2-Dibromo-3-chloropropane	25.000	ND	23.610	94.4	62 - 128
1,2-Dibromoethane	25.000	ND	25.440	102	77 - 121
Dibromomethane	25.000	ND	23.090	92.4	79 - 123
1,2-Dichlorobenzene	25.000	ND	22.890	91.6	80 - 119
1,3-Dichlorobenzene	25.000	ND	21.640	86.6	80 - 119
1,4-Dichlorobenzene	25.000	ND	23.080	92.3	79 - 118
Dichlorodifluoromethane	25.000	ND	23.290	93.2	32 - 152
1,1-Dichloroethane	25.000	ND	20.800	83.2	77 - 125



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
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Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW03D 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1418</u>	Laboratory ID:	<u>B[B1418-MS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1703604-15</u>		

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,2-Dichloroethane	25.000	ND	23.470	93.9	73 - 128
1,1-Dichloroethene	25.000	ND	24.160	96.6	71 - 131
cis-1,2-Dichloroethene	25.000	ND	22.730	90.9	78 - 123
trans-1,2-Dichloroethene	25.000	ND	22.710	90.8	75 - 124
1,2-Dichloropropane	25.000	ND	22.280	89.1	78 - 122
1,3-Dichloropropane	25.000	ND	25.030	100	80 - 119
2,2-Dichloropropane	25.000	ND	24.170	96.7	60 - 139
1,1-Dichloropropene	25.000	ND	23.280	93.1	79 - 125
cis-1,3-Dichloropropene	25.000	ND	23.910	95.6	75 - 124
trans-1,3-Dichloropropene	25.000	ND	25.180	101	73 - 127
Ethylbenzene	25.000	ND	23.190	92.8	79 - 121
Hexachlorobutadiene	25.000	ND	24.400	97.6	66 - 134
Isopropylbenzene	25.000	ND	20.600	82.4	72 - 131
p-Isopropyltoluene	25.000	ND	21.040	84.2	77 - 127
Methylene chloride	25.000	ND	22.720	90.9	74 - 124
Methyl t-butyl ether	25.000	ND	24.700	98.8	71 - 124
Naphthalene	25.000	ND	26.230	105	61 - 128
n-Propylbenzene	25.000	ND	21.280	85.1	76 - 126
Styrene	25.000	ND	22.970	91.9	78 - 123
1,1,1,2-Tetrachloroethane	25.000	ND	22.960	91.8	78 - 124
1,1,2,2-Tetrachloroethane	25.000	ND	23.010	92.0	71 - 121
Tetrachloroethene	25.000	ND	24.760	99.0	74 - 129
Toluene	25.000	ND	22.900	91.6	80 - 121
1,2,3-Trichlorobenzene	25.000	ND	24.540	98.2	69 - 129
1,2,4-Trichlorobenzene	25.000	ND	23.910	95.6	69 - 130



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW03D 170208

Laboratory: BC Laboratories SDG: 1703604
 Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[B1418 Laboratory ID: B[B1418-MS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1703604-15

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1-Trichloroethane	25.000	ND	24.350	97.4	74 - 131
1,1,2-Trichloroethane	25.000	ND	24.330	97.3	80 - 119
Trichloroethene	25.000	ND	24.110	96.4	79 - 123
Trichlorofluoromethane	25.000	ND	24.380	97.5	65 - 141
1,2,3-Trichloropropane	25.000	ND	28.090	112	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	ND	22.500	90.0	70 - 136
1,2,4-Trimethylbenzene	25.000	ND	21.890	87.6	76 - 124
1,3,5-Trimethylbenzene	25.000	ND	20.720	82.9	75 - 124
Vinyl chloride	25.000	ND	26.040	104	58 - 137
Total Xylenes	75.000	ND	67.480	90.0	79 - 121
Acetone	320.00	ND	334.69	105	39 - 160
Acetonitrile	160.00	ND	216.40	135	50 - 142
Allyl chloride	32.000	ND	33.240	104	68 - 130
t-Amyl Methyl ether	16.000	ND	16.510	103	68 - 128
Benzyl chloride	32.000	ND	34.910	109	42 - 138
t-Butyl alcohol	800.00	ND	853.13	107	68 - 129
Carbon disulfide	32.000	ND	35.060	110	64 - 133
Chloroprene	32.000	ND	34.180	107	65 - 135
Diisopropyl ether	16.000	ND	18.110	113	67 - 128
Ethyl t-butyl ether	16.000	ND	15.440	96.5	70 - 127
2-Hexanone	320.00	ND	339.05	106	57 - 139
Methyl ethyl ketone	160.00	ND	150.50	94.1	56 - 143
Methyl isobutyl ketone	160.00	ND	162.62	102	67 - 130
Vinyl acetate	160.00	ND	148.37	92.7	54 - 146



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW03D 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1418</u>	Laboratory ID:	<u>B[B1418-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1703604-15</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Benzene	25.000	25.980	104	20.4	30	79 - 120
Bromobenzene	25.000	25.710	103	9.79	30	80 - 120
Bromochloromethane	25.000	28.840	115	15.3	30	78 - 123
Bromodichloromethane	25.000	28.990	116	17.8	30	79 - 125
Bromoform	25.000	28.140	113	13.3	30	66 - 130
Bromomethane	25.000	24.560	98.2	23.6	30	53 - 141
n-Butylbenzene	25.000	25.970	104	16.8	30	75 - 128
sec-Butylbenzene	25.000	23.390	93.6	16.4	30	77 - 126
tert-Butylbenzene	25.000	24.330	97.3	13.0	30	78 - 124
Carbon tetrachloride	25.000	30.220	121	19.3	30	72 - 136
Chlorobenzene	25.000	27.540	110	16.0	30	82 - 118
Chloroethane	25.000	26.910	108	21.5	30	60 - 138
Chloroform	25.000	27.350	109	17.9	30	79 - 124
Chloromethane	25.000	29.910	120	19.0	30	50 - 139
2-Chlorotoluene	25.000	25.720	103	12.1	30	79 - 122
4-Chlorotoluene	25.000	26.560	106	16.8	30	78 - 122
Dibromochloromethane	25.000	29.910	120	17.1	30	74 - 126
1,2-Dibromo-3-chloropropane	25.000	26.450	106	11.3	30	62 - 128
1,2-Dibromoethane	25.000	29.050	116	13.3	30	77 - 121
Dibromomethane	25.000	26.340	105	13.1	30	79 - 123
1,2-Dichlorobenzene	25.000	26.130	105	13.2	30	80 - 119
1,3-Dichlorobenzene	25.000	24.660	98.6	13.0	30	80 - 119
1,4-Dichlorobenzene	25.000	25.970	104	11.8	30	79 - 118
Dichlorodifluoromethane	25.000	28.970	116	21.7	30	32 - 152
1,1-Dichloroethane	25.000	25.380	102	19.8	30	77 - 125
1,2-Dichloroethane	25.000	27.450	110	15.6	30	73 - 128



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW03D 170208

Laboratory: BC Laboratories SDG: 1703604
 Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[B1418 Laboratory ID: B[B1418-MSD1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1703604-15

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	25.000	29.450	118	19.7	30	71 - 131
cis-1,2-Dichloroethene	25.000	27.480	110	18.9	30	78 - 123
trans-1,2-Dichloroethene	25.000	27.820	111	20.2	30	75 - 124
1,2-Dichloropropane	25.000	26.360	105	16.8	30	78 - 122
1,3-Dichloropropane	25.000	28.690	115	13.6	30	80 - 119
2,2-Dichloropropane	25.000	28.690	115	17.1	30	60 - 139
1,1-Dichloropropene	25.000	28.770	115	21.1	30	79 - 125
cis-1,3-Dichloropropene	25.000	27.190	109	12.8	30	75 - 124
trans-1,3-Dichloropropene	25.000	29.480	118	15.7	30	73 - 127
Ethylbenzene	25.000	27.110	108	15.6	30	79 - 121
Hexachlorobutadiene	25.000	29.120	116	17.6	30	66 - 134
Isopropylbenzene	25.000	24.180	96.7	16.0	30	72 - 131
p-Isopropyltoluene	25.000	24.060	96.2	13.4	30	77 - 127
Methylene chloride	25.000	28.650	115	23.1	30	74 - 124
Methyl t-butyl ether	25.000	29.460	118	17.6	30	71 - 124
Naphthalene	25.000	31.620	126	18.6	30	61 - 128
n-Propylbenzene	25.000	24.910	99.6	15.7	30	76 - 126
Styrene	25.000	26.990	108	16.1	30	78 - 123
1,1,1,2-Tetrachloroethane	25.000	26.100	104	12.8	30	78 - 124
1,1,2,2-Tetrachloroethane	25.000	27.120	108	16.4	30	71 - 121
Tetrachloroethene	25.000	29.120	116	16.2	30	74 - 129
Toluene	25.000	27.370	109	17.8	30	80 - 121
1,2,3-Trichlorobenzene	25.000	29.010	116	16.7	30	69 - 129
1,2,4-Trichlorobenzene	25.000	27.360	109	13.5	30	69 - 130
1,1,1-Trichloroethane	25.000	28.250	113	14.8	30	74 - 131
1,1,2-Trichloroethane	25.000	29.460	118	19.1	30	80 - 119



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

S11-TT-MW03D 170208

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1418</u>	Laboratory ID:	<u>B[B1418-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1703604-15</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Trichloroethene	25.000	29.050	116	18.6	30	79 - 123
Trichlorofluoromethane	25.000	29.350	117	18.5	30	65 - 141
1,2,3-Trichloropropane	25.000	28.990	116	3.15	30	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	27.370	109	19.5	30	70 - 136
1,2,4-Trimethylbenzene	25.000	25.330	101	14.6	30	76 - 124
1,3,5-Trimethylbenzene	25.000	24.550	98.2	16.9	30	75 - 124
Vinyl chloride	25.000	30.800	123	16.7	30	58 - 137
Total Xylenes	75.000	79.320	106	16.1	30	79 - 121
Acetone	320.00	402.42	126	18.4	30	39 - 160
Acetonitrile	160.00	247.36	155 *	13.4	30	50 - 142
Allyl chloride	32.000	38.900	122	15.7	30	68 - 130
t-Amyl Methyl ether	16.000	20.290	127	20.5	30	68 - 128
Benzyl chloride	32.000	40.370	126	14.5	30	42 - 138
t-Butyl alcohol	800.00	1005.0	126	16.3	30	68 - 129
Carbon disulfide	32.000	40.300	126	13.9	30	64 - 133
Chloroprene	32.000	38.620	121	12.2	30	65 - 135
Diisopropyl ether	16.000	22.100	138 *	19.8	30	67 - 128
Ethyl t-butyl ether	16.000	18.980	119	20.6	30	70 - 127
2-Hexanone	320.00	416.43	130	20.5	30	57 - 139
Methyl ethyl ketone	160.00	179.47	112	17.6	30	56 - 143
Methyl isobutyl ketone	160.00	201.51	126	21.4	30	67 - 130
Vinyl acetate	160.00	181.26	113	20.0	30	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water
Batch: B[B1276 Laboratory ID: B[B1276-BS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	25.000	21.460	85.8	79 - 120
Bromobenzene	25.000	23.280	93.1	80 - 120
Bromochloromethane	25.000	24.020	96.1	78 - 123
Bromodichloromethane	25.000	24.780	99.1	79 - 125
Bromoform	25.000	21.950	87.8	66 - 130
Bromomethane	25.000	18.510	74.0	53 - 141
n-Butylbenzene	25.000	24.000	96.0	75 - 128
sec-Butylbenzene	25.000	21.250	85.0	77 - 126
tert-Butylbenzene	25.000	21.900	87.6	78 - 124
Carbon tetrachloride	25.000	26.300	105	72 - 136
Chlorobenzene	25.000	24.280	97.1	82 - 118
Chloroethane	25.000	23.370	93.5	60 - 138
Chloroform	25.000	23.430	93.7	79 - 124
Chloromethane	25.000	22.540	90.2	50 - 139
2-Chlorotoluene	25.000	24.150	96.6	79 - 122
4-Chlorotoluene	25.000	23.490	94.0	78 - 122
Dibromochloromethane	25.000	24.830	99.3	74 - 126
1,2-Dibromo-3-chloropropane	25.000	20.970	83.9	62 - 128
1,2-Dibromoethane	25.000	23.220	92.9	77 - 121
Dibromomethane	25.000	22.020	88.1	79 - 123
1,2-Dichlorobenzene	25.000	23.240	93.0	80 - 119
1,3-Dichlorobenzene	25.000	22.070	88.3	80 - 119
1,4-Dichlorobenzene	25.000	23.530	94.1	79 - 118
Dichlorodifluoromethane	25.000	27.410	110	32 - 152



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1-Dichloroethane	25.000	20.980	83.9	77 - 125
1,2-Dichloroethane	25.000	22.730	90.9	73 - 128
1,1-Dichloroethene	25.000	25.450	102	71 - 131
cis-1,2-Dichloroethene	25.000	23.330	93.3	78 - 123
trans-1,2-Dichloroethene	25.000	24.110	96.4	75 - 124
1,2-Dichloropropane	25.000	22.110	88.4	78 - 122
1,3-Dichloropropane	25.000	22.270	89.1	80 - 119
2,2-Dichloropropane	25.000	25.490	102	60 - 139
1,1-Dichloropropene	25.000	23.990	96.0	79 - 125
cis-1,3-Dichloropropene	25.000	23.150	92.6	75 - 124
trans-1,3-Dichloropropene	25.000	23.390	93.6	73 - 127
Ethylbenzene	25.000	24.090	96.4	79 - 121
Hexachlorobutadiene	25.000	26.390	106	66 - 134
Isopropylbenzene	25.000	22.020	88.1	72 - 131
p-Isopropyltoluene	25.000	22.930	91.7	77 - 127
Methylene chloride	25.000	23.070	92.3	74 - 124
Methyl t-butyl ether	25.000	22.490	90.0	71 - 124
Naphthalene	25.000	22.990	92.0	61 - 128
n-Propylbenzene	25.000	22.340	89.4	76 - 126
Styrene	25.000	23.830	95.3	78 - 123
1,1,1,2-Tetrachloroethane	25.000	23.520	94.1	78 - 124
1,1,2,2-Tetrachloroethane	25.000	21.730	86.9	71 - 121
Tetrachloroethene	25.000	26.810	107	74 - 129
Toluene	25.000	24.010	96.0	80 - 121



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1276</u>	Laboratory ID:	<u>B[B1276-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,2,3-Trichlorobenzene	25.000	23.240	93.0	69 - 129
1,2,4-Trichlorobenzene	25.000	24.740	99.0	69 - 130
1,1,1-Trichloroethane	25.000	24.410	97.6	74 - 131
1,1,2-Trichloroethane	25.000	23.240	93.0	80 - 119
Trichloroethene	25.000	26.560	106	79 - 123
Trichlorofluoromethane	25.000	27.000	108	65 - 141
1,2,3-Trichloropropane	25.000	24.010	96.0	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	23.710	94.8	70 - 136
1,2,4-Trimethylbenzene	25.000	22.940	91.8	76 - 124
1,3,5-Trimethylbenzene	25.000	22.590	90.4	75 - 124
Vinyl chloride	25.000	26.370	105	58 - 137
Total Xylenes	75.000	71.370	95.2	79 - 121
Acetone	320.00	278.73	87.1	39 - 160
Acetonitrile	160.00	177.90	111	50 - 142
Allyl chloride	32.000	29.680	92.8	68 - 130
t-Amyl Methyl ether	16.000	13.160	82.2	68 - 128
Benzyl chloride	32.000	28.270	88.3	42 - 138
t-Butyl alcohol	800.00	715.20	89.4	68 - 129
Carbon disulfide	32.000	31.180	97.4	64 - 133
Chloroprene	32.000	32.090	100	65 - 135
Diisopropyl ether	16.000	15.800	98.8	67 - 128
Ethyl t-butyl ether	16.000	12.980	81.1	70 - 127
2-Hexanone	320.00	259.83	81.2	57 - 139
Methyl ethyl ketone	160.00	125.67	78.5	56 - 143



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water
Batch: B[B1276 Laboratory ID: B[B1276-BS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Methyl isobutyl ketone	160.00	134.07	83.8	67 - 130
Vinyl acetate	160.00	121.07	75.7	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1418</u>	Laboratory ID:	<u>B[B1418-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	25.000	22.290	89.2	79 - 120
Bromobenzene	25.000	23.510	94.0	80 - 120
Bromochloromethane	25.000	23.190	92.8	78 - 123
Bromodichloromethane	25.000	23.990	96.0	79 - 125
Bromoform	25.000	23.030	92.1	66 - 130
Bromomethane	25.000	17.970	71.9	53 - 141
n-Butylbenzene	25.000	24.050	96.2	75 - 128
sec-Butylbenzene	25.000	22.240	89.0	77 - 126
tert-Butylbenzene	25.000	22.950	91.8	78 - 124
Carbon tetrachloride	25.000	26.220	105	72 - 136
Chlorobenzene	25.000	25.280	101	82 - 118
Chloroethane	25.000	23.210	92.8	60 - 138
Chloroform	25.000	23.030	92.1	79 - 124
Chloromethane	25.000	24.380	97.5	50 - 139
2-Chlorotoluene	25.000	24.830	99.3	79 - 122
4-Chlorotoluene	25.000	24.870	99.5	78 - 122
Dibromochloromethane	25.000	23.860	95.4	74 - 126
1,2-Dibromo-3-chloropropane	25.000	20.500	82.0	62 - 128
1,2-Dibromoethane	25.000	22.640	90.6	77 - 121
Dibromomethane	25.000	21.750	87.0	79 - 123
1,2-Dichlorobenzene	25.000	23.230	92.9	80 - 119
1,3-Dichlorobenzene	25.000	22.790	91.2	80 - 119
1,4-Dichlorobenzene	25.000	24.120	96.5	79 - 118
Dichlorodifluoromethane	25.000	27.040	108	32 - 152



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1418</u>	Laboratory ID:	<u>B[B1418-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1-Dichloroethane	25.000	21.450	85.8	77 - 125
1,2-Dichloroethane	25.000	22.770	91.1	73 - 128
1,1-Dichloroethene	25.000	25.810	103	71 - 131
cis-1,2-Dichloroethene	25.000	22.870	91.5	78 - 123
trans-1,2-Dichloroethene	25.000	24.410	97.6	75 - 124
1,2-Dichloropropane	25.000	22.650	90.6	78 - 122
1,3-Dichloropropane	25.000	21.670	86.7	80 - 119
2,2-Dichloropropane	25.000	25.670	103	60 - 139
1,1-Dichloropropene	25.000	24.890	99.6	79 - 125
cis-1,3-Dichloropropene	25.000	22.760	91.0	75 - 124
trans-1,3-Dichloropropene	25.000	23.340	93.4	73 - 127
Ethylbenzene	25.000	24.430	97.7	79 - 121
Hexachlorobutadiene	25.000	27.370	109	66 - 134
Isopropylbenzene	25.000	23.080	92.3	72 - 131
p-Isopropyltoluene	25.000	23.700	94.8	77 - 127
Methylene chloride	25.000	22.850	91.4	74 - 124
Methyl t-butyl ether	25.000	21.730	86.9	71 - 124
Naphthalene	25.000	23.840	95.4	61 - 128
n-Propylbenzene	25.000	22.850	91.4	76 - 126
Styrene	25.000	24.260	97.0	78 - 123
1,1,1,2-Tetrachloroethane	25.000	23.420	93.7	78 - 124
1,1,2,2-Tetrachloroethane	25.000	21.380	85.5	71 - 121
Tetrachloroethene	25.000	26.300	105	74 - 129
Toluene	25.000	23.950	95.8	80 - 121



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[B1418</u>	Laboratory ID:	<u>B[B1418-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,2,3-Trichlorobenzene	25.000	23.610	94.4	69 - 129
1,2,4-Trichlorobenzene	25.000	24.810	99.2	69 - 130
1,1,1-Trichloroethane	25.000	25.250	101	74 - 131
1,1,2-Trichloroethane	25.000	22.140	88.6	80 - 119
Trichloroethene	25.000	26.600	106	79 - 123
Trichlorofluoromethane	25.000	26.450	106	65 - 141
1,2,3-Trichloropropane	25.000	23.550	94.2	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	24.190	96.8	70 - 136
1,2,4-Trimethylbenzene	25.000	23.140	92.6	76 - 124
1,3,5-Trimethylbenzene	25.000	22.710	90.8	75 - 124
Vinyl chloride	25.000	27.060	108	58 - 137
Total Xylenes	75.000	71.320	95.1	79 - 121
Acetone	320.00	300.16	93.8	39 - 160
Acetonitrile	160.00	192.04	120	50 - 142
Allyl chloride	32.000	33.050	103	68 - 130
t-Amyl Methyl ether	16.000	14.670	91.7	68 - 128
Benzyl chloride	32.000	30.410	95.0	42 - 138
t-Butyl alcohol	800.00	719.16	89.9	68 - 129
Carbon disulfide	32.000	33.630	105	64 - 133
Chloroprene	32.000	34.000	106	65 - 135
Diisopropyl ether	16.000	16.020	100	67 - 128
Ethyl t-butyl ether	16.000	13.950	87.2	70 - 127
2-Hexanone	320.00	267.83	83.7	57 - 139
Methyl ethyl ketone	160.00	133.58	83.5	56 - 143



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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Matrix: Water
Batch: B[B1418 Laboratory ID: B[B1418-BS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Methyl isobutyl ketone	160.00	141.00	88.1	67 - 130
Vinyl acetate	160.00	131.36	82.1	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



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Project Number: 5023146096
Project Manager: Kelli Miller

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702048 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	1702048-TUN1	26JAN03.D	01/26/17 12:01
Cal Standard	1702048-CAL1	26JAN06.D	01/26/17 16:07
Cal Standard	1702048-CAL2	26JAN07.D	01/26/17 16:30
Cal Standard	1702048-CAL3	26JAN08.D	01/26/17 16:53
Cal Standard	1702048-CAL5	26JAN10.D	01/26/17 17:39
Cal Standard	1702048-CAL6	26JAN11.D	01/26/17 18:02
Cal Standard	1702048-CAL4	26JAN14.D	01/26/17 19:12
MS Tune	1702048-TUN2	07FEB05.D	02/07/17 08:42
Cal Standard	1702048-CAL7	07FEB07.D	02/07/17 09:30
Cal Standard	1702048-CAL8	07FEB08.D	02/07/17 09:53
Cal Standard	1702048-CAL9	07FEB09.D	02/07/17 10:17
Cal Standard	1702048-CALA	07FEB10.D	02/07/17 10:40
Cal Standard	1702048-CALB	07FEB11.D	02/07/17 11:03
Cal Standard	1702048-CALC	07FEB12.D	02/07/17 11:27
MS Tune	1702048-TUN3	13DEC05.D	12/13/16 09:45
Cal Standard	1702048-CALD	13DEC06.D	12/13/16 10:10
Cal Standard	1702048-CALE	13DEC07.D	12/13/16 10:32
Cal Standard	1702048-CALF	13DEC08.D	12/13/16 10:55
Cal Standard	1702048-CALG	13DEC09.D	12/13/16 11:18
Cal Standard	1702048-CALH	13DEC10.D	12/13/16 11:41
Cal Standard	1702048-CALI	13DEC11.D	12/13/16 12:04



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Project Number: 5023146096
Project Manager: Kelli Miller

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702674 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1702674-ICV1	26JAN15.D	01/26/17 19:35
Initial Cal Blank	1702674-ICB1	26JAN17.D	01/26/17 20:23
Initial Cal Check	1702674-ICV2	07FEB15.D	02/07/17 12:46
Initial Cal Blank	1702674-ICB2	07FEB17.D	02/07/17 13:33
MS Tune	1702674-TUN1	14FEB58.D	02/15/17 04:04
Calibration Check	1702674-CCV1	14FEB59.D	02/15/17 04:27
Calibration Check	1702674-CCV2	14FEB60.D	02/15/17 04:49
Calibration Blank	1702674-CCB1	14FEB61.D	02/15/17 05:12
Blank	B[B1276-BLK1	15FEB01.D	02/15/17 06:08
DUP09_170208	1703604-01	15FEB02.D	02/15/17 06:31
M03-16_170208	1703604-02	15FEB03.D	02/15/17 06:54
S11-TT-MW04B_170208	1703604-03	15FEB04.D	02/15/17 07:17
S11-TT-MW04D_170208	1703604-05	15FEB06.D	02/15/17 08:03
S11-TT-MW04E_170208	1703604-06	15FEB07.D	02/15/17 08:27
S21-TT-MW02A_170208	1703604-07	15FEB08.D	02/15/17 08:50
S21-TT-MW02B_170208	1703604-08	15FEB09.D	02/15/17 09:13
S21-TT-MW02D_170208	1703604-10	15FEB11.D	02/15/17 09:59
DUP09_170208	1703604-01RE1	15FEB12.D	02/15/17 10:22
M03-16_170208	1703604-02RE1	15FEB13.D	02/15/17 10:46
S11-TT-MW04C_170208	1703604-04	15FEB14.D	02/15/17 11:09
S21-TT-MW02C_170208	1703604-09	15FEB15.D	02/15/17 11:32
S21-TT-MW02E_170208	1703604-11	15FEB16.D	02/15/17 11:55
S21-TT-MW03E_170208	1703604-12	15FEB17.D	02/15/17 12:19
S11-TT-MW03B_170208	1703604-13	15FEB18.D	02/15/17 12:42
S11-TT-MW04B_170208	1703604-03RE1	15FEB19.D	02/15/17 13:05
S21-TT-MW02B_170208	1703604-08RE1	15FEB21.D	02/15/17 13:51



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Project Manager: Kelli Miller

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702674 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	B[B1276-BS1	15FEB22.D	02/15/17 14:15
S11-TT-MW04E_170208	B[B1276-MS1	15FEB23.D	02/15/17 14:38
S11-TT-MW04E_170208	B[B1276-MSD1	15FEB24.D	02/15/17 15:01
MS Tune	1702674-TUN2	15FEB26.D	02/15/17 15:47
Calibration Check	1702674-CCV3	15FEB27.D	02/15/17 16:10
Calibration Check	1702674-CCV4	15FEB28.D	02/15/17 16:34
Calibration Blank	1702674-CCB2	15FEB29.D	02/15/17 16:57



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ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702721 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1702721-ICV1	26JAN15.D	01/26/17 19:35
Initial Cal Blank	1702721-ICB1	26JAN17.D	01/26/17 20:23
Initial Cal Check	1702721-ICV2	07FEB15.D	02/07/17 12:46
Initial Cal Blank	1702721-ICB2	07FEB17.D	02/07/17 13:33
MS Tune	1702721-TUN1	16FEB02.D	02/16/17 07:49
Calibration Check	1702721-CCV1	16FEB03.D	02/16/17 08:12
Calibration Check	1702721-CCV2	16FEB06.D	02/16/17 09:21
Calibration Blank	1702721-CCB1	16FEB07.D	02/16/17 09:45
Blank	B[B1418-BLK1	16FEB08.D	02/16/17 10:08
S11-TT-MW03C_170208	1703604-14	16FEB09.D	02/16/17 10:31
S11-TT-MW03D_170208	1703604-15	16FEB10.D	02/16/17 10:54
S11-TT-MW03E_170208	1703604-16	16FEB11.D	02/16/17 11:17
S11-TT-MW04A_170208	1703604-17	16FEB12.D	02/16/17 11:41
S11-TT-MW05D_170208	1703604-18	16FEB13.D	02/16/17 12:04
S11-TT-MW05E_170208	1703604-19	16FEB14.D	02/16/17 12:27
S21-TT-MW03A_170208	1703604-20	16FEB15.D	02/16/17 12:51
S21-TT-MW03B_170208	1703604-21	16FEB16.D	02/16/17 13:14
S21-TT-MW03C_170208	1703604-22	16FEB17.D	02/16/17 13:37
S21-TT-MW03D_170208	1703604-23	16FEB18.D	02/16/17 14:00
TB16_170208	1703604-24	16FEB19.D	02/16/17 14:23
S21-TT-MW02A_170208	1703604-07RE1	16FEB20.D	02/16/17 14:46
LCS	B[B1418-BS1	16FEB22.D	02/16/17 15:33
S11-TT-MW03D_170208	B[B1418-MS1	16FEB23.D	02/16/17 15:56
S11-TT-MW03D_170208	B[B1418-MSD1	16FEB24.D	02/16/17 16:19
S11-TT-MW04A_170208	1703604-17RE1	16FEB26.D	02/16/17 17:05
EB30_170208	1703604-25	16FEB27.D	02/16/17 17:28



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Project Manager: Kelli Miller

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702721 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
EB31_170208	1703604-26	16FEB28.D	02/16/17 17:51
EB32_170208	1703604-27	16FEB29.D	02/16/17 18:14
S11-TT-MW03A_170208	1703604-28	16FEB30.D	02/16/17 18:38
MS Tune	1702721-TUN2	16FEB32.D	02/16/17 19:24
Calibration Check	1702721-CCV3	16FEB33.D	02/16/17 19:47
Calibration Check	1702721-CCV4	16FEB34.D	02/16/17 20:10
Calibration Blank	1702721-CCB2	16FEB35.D	02/16/17 20:33



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Project Manager: Kelli Miller

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Lab File ID: 26JAN03.D Injection Date: 01/26/17
Instrument ID: MS-V5 Injection Time: 12:01
Sequence: 1702048 Lab Sample ID: 1702048-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	32.2	PASS
Mass 75	30 - 60% of Mass 95	50.9	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.86	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	64.3	PASS
Mass 175	5 - 9% of Mass 174	7.93	PASS
Mass 176	95 - 101% of Mass 174	98.5	PASS
Mass 177	5 - 9% of Mass 176	5.13	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>07FEB05.D</u>	Injection Date:	<u>02/07/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>08:42</u>
Sequence:	<u>1702048</u>	Lab Sample ID:	<u>1702048-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	25.6	PASS
Mass 75	30 - 60% of Mass 95	46.1	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.48	PASS
Mass 173	Less than 2% of Mass 174	0.982	PASS
Mass 174	50 - 100% of Mass 95	89.9	PASS
Mass 175	5 - 9% of Mass 174	8.56	PASS
Mass 176	95 - 101% of Mass 174	101	PASS
Mass 177	5 - 9% of Mass 176	5.99	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>13DEC05.D</u>	Injection Date:	<u>12/13/16</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>09:45</u>
Sequence:	<u>1702048</u>	Lab Sample ID:	<u>1702048-TUN3</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	25.9	PASS
Mass 75	30 - 60% of Mass 95	54.3	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.64	PASS
Mass 173	Less than 2% of Mass 174	1.48	PASS
Mass 174	50 - 100% of Mass 95	75.1	PASS
Mass 175	5 - 9% of Mass 174	7.62	PASS
Mass 176	95 - 101% of Mass 174	98	PASS
Mass 177	5 - 9% of Mass 176	6.02	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Lab File ID: 14FEB58.D Injection Date: 02/15/17
Instrument ID: MS-V5 Injection Time: 04:04
Sequence: 1702674 Lab Sample ID: 1702674-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	24.5	PASS
Mass 75	30 - 60% of Mass 95	45.1	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.2	PASS
Mass 173	Less than 2% of Mass 174	0.875	PASS
Mass 174	50 - 100% of Mass 95	74	PASS
Mass 175	5 - 9% of Mass 174	5.91	PASS
Mass 176	95 - 101% of Mass 174	101	PASS
Mass 177	5 - 9% of Mass 176	6.24	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Lab File ID: 15FEB26.D Injection Date: 02/15/17
Instrument ID: MS-V5 Injection Time: 15:47
Sequence: 1702674 Lab Sample ID: 1702674-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	24.3	PASS
Mass 75	30 - 60% of Mass 95	43.9	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.46	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	86.2	PASS
Mass 175	5 - 9% of Mass 174	8.47	PASS
Mass 176	95 - 101% of Mass 174	99.1	PASS
Mass 177	5 - 9% of Mass 176	7.76	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Lab File ID: 16FEB02.D Injection Date: 02/16/17
Instrument ID: MS-V5 Injection Time: 07:49
Sequence: 1702721 Lab Sample ID: 1702721-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	22.3	PASS
Mass 75	30 - 60% of Mass 95	45	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.8	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	94	PASS
Mass 175	5 - 9% of Mass 174	7.74	PASS
Mass 176	95 - 101% of Mass 174	99.8	PASS
Mass 177	5 - 9% of Mass 176	8	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>16FEB32.D</u>	Injection Date:	<u>02/16/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>19:24</u>
Sequence:	<u>1702721</u>	Lab Sample ID:	<u>1702721-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	27.7	PASS
Mass 75	30 - 60% of Mass 95	40.9	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	5.46	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	74.7	PASS
Mass 175	5 - 9% of Mass 174	6.47	PASS
Mass 176	95 - 101% of Mass 174	96.7	PASS
Mass 177	5 - 9% of Mass 176	7.14	PASS



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>26JAN15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>01/26/17</u>
Lab Sample ID:	<u>1702674-ICV1</u>	Injection Time:	<u>19:35</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	24.520	1.889545	1.853263		-1.9	20
Bromobenzene	A	25.000	26.750	1.179324	1.261962		7.0	20
Bromochloromethane	A	25.000	27.870	0.1547174	0.1724858		11.5	20
Bromodichloromethane	A	25.000	26.320	0.3292103	0.3466539		5.3	20
Bromoform	A	25.000	29.540	0.3506939	0.4143899	0.1	18.2	20
Bromomethane	A	25.000	25.400	0.3180084	0.323081		1.6	20
n-Butylbenzene	A	25.000	24.450	3.493597	3.416282		-2.2	20
sec-Butylbenzene	A	25.000	22.320	5.379312	4.803427		-10.7	20
tert-Butylbenzene	A	25.000	24.540	3.852201	3.780801		-1.9	20
Carbon tetrachloride	A	25.000	24.550	0.4688551	0.4604308		-1.8	20
Chlorobenzene	A	25.000	25.550	2.978027	3.04388	0.3	2.2	20
Chloroethane	A	25.000	25.010	0.3902835	0.3904325		0.04	20
Chloroform	A	25.000	25.080	0.7548469	0.7572197		0.3	20
Chloromethane	L	25.000	21.450	0.6989857	0.5449247	0.1	-14.2	20
2-Chlorotoluene	A	25.000	25.230	3.666018	3.699401		0.9	20
4-Chlorotoluene	A	25.000	25.250	3.285453	3.318671		1.0	20
Dibromochloromethane	A	25.000	28.210	0.1708407	0.1927603		12.8	20
1,2-Dibromo-3-chloropropane	L	25.000	26.780	0.0666406	0.0808198		7.1	20
1,2-Dibromoethane	A	25.000	28.160	0.1390115	0.1565905		12.6	20
Dibromomethane	A	25.000	25.600	0.1132441	0.1159592		2.4	20
1,2-Dichlorobenzene	A	25.000	25.120	1.693334	1.701651		0.5	20
1,3-Dichlorobenzene	A	25.000	23.440	2.068389	1.939285		-6.2	20
1,4-Dichlorobenzene	A	25.000	25.950	1.916207	1.989058		3.8	20



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>26JAN15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>01/26/17</u>
Lab Sample ID:	<u>1702674-ICV1</u>	Injection Time:	<u>19:35</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	23.190	0.4765408	0.4420548		-7.2	20
1,1-Dichloroethane	A	25.000	25.000	1.030991	1.031141	0.1	0.01	20
1,2-Dichloroethane	A	25.000	26.060	0.438219	0.4568204		4.2	20
1,1-Dichloroethene	A	25.000	24.850	0.7766588	0.7719666		-0.6	20
cis-1,2-Dichloroethene	A	25.000	25.440	0.46668	0.474977		1.8	20
trans-1,2-Dichloroethene	A	25.000	23.910	0.4502706	0.4305847		-4.4	20
1,2-Dichloropropane	A	25.000	25.240	0.3723232	0.3758662		1.0	20
1,3-Dichloropropane	A	25.000	27.900	0.2667047	0.2976682		11.6	20
2,2-Dichloropropane	A	25.000	23.050	0.6461859	0.595668		-7.8	20
1,1-Dichloropropene	A	25.000	24.340	0.61317	0.5969539		-2.6	20
cis-1,3-Dichloropropene	A	25.000	25.890	0.436368	0.4519754		3.6	20
trans-1,3-Dichloropropene	A	25.000	27.510	0.3001727	0.3303126		10.0	20
Ethylbenzene	A	25.000	24.810	1.699115	1.686003		-0.8	20
Hexachlorobutadiene	A	25.000	22.520	0.8012975	0.7218586		-9.9	20
Isopropylbenzene	A	25.000	23.670	5.188549	4.913541		-5.3	20
p-Isopropyltoluene	A	25.000	22.960	4.064913	3.733001		-8.2	20
Methylene chloride	L	25.000	27.090	0.601454	0.4144394		8.4	20
Methyl t-butyl ether	A	25.000	29.040	0.6285989	0.7300879		16.1	20
Naphthalene	A	25.000	28.850	1.162765	1.341925		15.4	20
n-Propylbenzene	A	25.000	23.210	5.959786	5.533521		-7.2	20
Styrene	A	25.000	26.030	2.90027	3.020175		4.1	20
1,1,1,2-Tetrachloroethane	A	25.000	25.800	0.9261768	0.9556971		3.2	20
1,1,2,2-Tetrachloroethane	A	25.000	28.950	0.555952	0.6436956	0.3	15.8	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>26JAN15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>01/26/17</u>
Lab Sample ID:	<u>1702674-ICV1</u>	Injection Time:	<u>19:35</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	23.430	0.3412463	0.3197576		-6.3	20
Toluene	A	25.000	24.190	0.7797766	0.7546079		-3.2	20
1,2,3-Trichlorobenzene	A	25.000	26.710	1.02527	1.095334		6.8	20
1,2,4-Trichlorobenzene	A	25.000	26.280	1.194842	1.256226		5.1	20
1,1,1-Trichloroethane	A	25.000	24.320	0.6397625	0.6223499		-2.7	20
1,1,2-Trichloroethane	A	25.000	28.140	0.1533095	0.1725615		12.6	20
Trichloroethene	A	25.000	25.380	0.3255704	0.3305227		1.5	20
Trichlorofluoromethane	A	25.000	23.360	0.5867905	0.5482351		-6.6	20
1,2,3-Trichloropropane	L	25.000	29.760	0.105337	0.1291837		19.0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.390	0.4183029	0.3745928		-10.4	20
1,2,4-Trimethylbenzene	A	25.000	24.970	3.597754	3.593467		-0.1	20
1,3,5-Trimethylbenzene	A	25.000	23.180	3.970515	3.680896		-7.3	20
Vinyl chloride	A	25.000	20.170	0.5958562	0.4807637		-19.3	20
Total Xylenes	A	75.000	74.270	1.988127	1.96886		-1.0	20
p- & m-Xylenes	A	50.000	49.530	2.011739	1.992895		-0.9	20
o-Xylene	A	25.000	24.740	1.940902	1.920791		-1.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>07FEB15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/07/17</u>
Lab Sample ID:	<u>1702674-ICV2</u>	Injection Time:	<u>12:46</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	315.03	0.044841	4.414517E-02		-1.6	20
Acetonitrile	L	160.00	201.66	1.965066E-02	2.067974E-02		26.0	20 *
Allyl chloride	A	32.000	31.180	1.114402	1.08574		-2.6	20
t-Amyl Methyl ether	A	16.000	15.090	0.7281162	0.6866905		-5.7	20
Benzyl chloride	A	32.000	31.760	0.8656921	0.8592213		-0.7	20
t-Butyl alcohol	A	800.00	811.29	1.280474E-02	1.298544E-02		1.4	20
Carbon disulfide	A	32.000	32.220	1.344744	1.354047		0.7	20
Chloroprene	A	32.000	31.360	1.000946	0.9807911		-2.0	20
Diisopropyl ether	A	16.000	15.550	0.3174881	0.3085884		-2.8	20
Ethyl t-butyl ether	A	16.000	15.050	1.311089	1.233435		-5.9	20
2-Hexanone	Q	320.00	312.86	0.0923643	8.615645E-02		-2.2	20
Methyl ethyl ketone	A	160.00	154.88	0.0879739	0.0851614		-3.2	20
Methyl isobutyl ketone	A	160.00	147.91	0.1389299	0.12843		-7.6	20
Vinyl acetate	A	160.00	147.71	0.6344058	0.5856918		-7.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>14FEB59.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV1</u>	Injection Time:	<u>04:27</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	22.460	1.889545	1.697804		-10.1	20
Bromobenzene	A	25.000	22.100	1.179324	1.042614		-11.6	20
Bromochloromethane	A	25.000	25.580	0.1547174	0.1582773		2.3	20
Bromodichloromethane	A	25.000	23.930	0.3292103	0.315149		-4.3	20
Bromoform	A	25.000	22.220	0.3506939	0.3116894	0.1	-11.1	20
Bromomethane	A	25.000	17.300	0.3180084	0.220056		-30.8	20 *
n-Butylbenzene	A	25.000	23.130	3.493597	3.232935		-7.5	20
sec-Butylbenzene	A	25.000	21.680	5.379312	4.664938		-13.3	20
tert-Butylbenzene	A	25.000	21.460	3.852201	3.306306		-14.2	20
Carbon tetrachloride	A	25.000	25.400	0.4688551	0.4763154		1.6	20
Chlorobenzene	A	25.000	23.340	2.978027	2.779804	0.3	-6.7	20
Chloroethane	A	25.000	23.900	0.3902835	0.3730576		-4.4	20
Chloroform	A	25.000	23.030	0.7548469	0.6954035		-7.9	20
Chloromethane	L	25.000	25.560	0.6989857	0.6458024	0.1	2.2	20
2-Chlorotoluene	A	25.000	22.800	3.666018	3.343284		-8.8	20
4-Chlorotoluene	A	25.000	22.530	3.285453	2.960812		-9.9	20
Dibromochloromethane	A	25.000	23.850	0.1708407	0.1630031		-4.6	20
1,2-Dibromo-3-chloropropane	L	25.000	25.550	0.0666406	0.077129		2.2	20
1,2-Dibromoethane	A	25.000	23.460	0.1390115	0.1304572		-6.2	20
Dibromomethane	A	25.000	21.960	0.1132441	9.949058E-02		-12.1	20
1,2-Dichlorobenzene	A	25.000	23.690	1.693334	1.60477		-5.2	20
1,3-Dichlorobenzene	A	25.000	21.800	2.068389	1.803793		-12.8	20
1,4-Dichlorobenzene	A	25.000	23.410	1.916207	1.794565		-6.3	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>14FEB59.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV1</u>	Injection Time:	<u>04:27</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	26.780	0.4765408	0.5104032		7.1	20
1,1-Dichloroethane	A	25.000	21.600	1.030991	0.8907072	0.1	-13.6	20
1,2-Dichloroethane	A	25.000	23.520	0.438219	0.4123334		-5.9	20
1,1-Dichloroethene	A	25.000	25.120	0.7766588	0.780541		0.5	20
cis-1,2-Dichloroethene	A	25.000	23.840	0.46668	0.4451155		-4.6	20
trans-1,2-Dichloroethene	A	25.000	23.510	0.4502706	0.4235014		-5.9	20
1,2-Dichloropropane	A	25.000	21.940	0.3723232	0.3266954		-12.3	20
1,3-Dichloropropane	A	25.000	23.050	0.2667047	0.2459262		-7.8	20
2,2-Dichloropropane	A	25.000	16.860	0.6461859	0.4358589		-32.5	20 *
1,1-Dichloropropene	A	25.000	23.540	0.61317	0.5773325		-5.8	20
cis-1,3-Dichloropropene	A	25.000	21.500	0.436368	0.3753566		-14.0	20
trans-1,3-Dichloropropene	A	25.000	21.450	0.3001727	0.2575204		-14.2	20
Ethylbenzene	A	25.000	22.420	1.699115	1.523488		-10.3	20
Hexachlorobutadiene	A	25.000	28.290	0.8012975	0.9066957		13.2	20
Isopropylbenzene	A	25.000	22.000	5.188549	4.566718		-12.0	20
p-Isopropyltoluene	A	25.000	22.540	4.064913	3.664857		-9.8	20
Methylene chloride	L	25.000	24.150	0.601454	0.3734833		-3.4	20
Methyl t-butyl ether	A	25.000	23.840	0.6285989	0.5994272		-4.6	20
Naphthalene	A	25.000	20.880	1.162765	0.9709363		-16.5	20
n-Propylbenzene	A	25.000	21.410	5.959786	5.10483		-14.3	20
Styrene	A	25.000	23.110	2.90027	2.681331		-7.5	20
1,1,1,2-Tetrachloroethane	A	25.000	22.120	0.9261768	0.8195791		-11.5	20
1,1,2,2-Tetrachloroethane	A	25.000	20.250	0.555952	0.4503788	0.3	-19.0	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>14FEB59.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV1</u>	Injection Time:	<u>04:27</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	23.470	0.3412463	0.3202942		-6.1	20
Toluene	A	25.000	22.580	0.7797766	0.7043779		-9.7	20
1,2,3-Trichlorobenzene	A	25.000	20.280	1.02527	0.8318445		-18.9	20
1,2,4-Trichlorobenzene	A	25.000	23.370	1.194842	1.117056		-6.5	20
1,1,1-Trichloroethane	A	25.000	24.720	0.6397625	0.6325737		-1.1	20
1,1,2-Trichloroethane	A	25.000	23.070	0.1533095	0.1414847		-7.7	20
Trichloroethene	A	25.000	23.710	0.3255704	0.308786		-5.2	20
Trichlorofluoromethane	A	25.000	27.560	0.5867905	0.6469918		10.3	20
1,2,3-Trichloropropane	L	25.000	22.590	0.105337	9.985561E-02		-9.6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	23.690	0.4183029	0.3963329		-5.3	20
1,2,4-Trimethylbenzene	A	25.000	23.090	3.597754	3.323244		-7.6	20
1,3,5-Trimethylbenzene	A	25.000	22.180	3.970515	3.523163		-11.3	20
Vinyl chloride	A	25.000	27.900	0.5958562	0.6650486		11.6	20
Total Xylenes	A	75.000	66.940	1.988127	1.774151		-10.8	20
p- & m-Xylenes	A	50.000	44.370	2.011739	1.785269		-11.3	20
o-Xylene	A	25.000	22.570	1.940902	1.751915		-9.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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Project: Alameda
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Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>14FEB60.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV2</u>	Injection Time:	<u>04:49</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	321.12	0.044841	4.499762E-02		0.3	20
Acetonitrile	L	160.00	192.06	1.965066E-02	1.976693E-02		20.0	20
Allyl chloride	A	32.000	27.910	1.114402	0.9719905		-12.8	20
t-Amyl Methyl ether	A	16.000	14.070	0.7281162	0.6404077		-12.0	20
Benzyl chloride	A	32.000	17.740	0.8656921	0.4797899		-44.6	20 *
t-Butyl alcohol	A	800.00	703.26	1.280474E-02	1.125628E-02		-12.1	20
Carbon disulfide	A	32.000	29.890	1.344744	1.256279		-6.6	20
Chloroprene	A	32.000	30.100	1.000946	0.9415849		-5.9	20
Diisopropyl ether	A	16.000	14.810	0.3174881	0.2938601		-7.4	20
Ethyl t-butyl ether	A	16.000	13.720	1.311089	1.124478		-14.2	20
2-Hexanone	Q	320.00	279.64	0.0923643	7.835233E-02		-12.6	20
Methyl ethyl ketone	A	160.00	135.29	0.0879739	7.438495E-02		-15.4	20
Methyl isobutyl ketone	A	160.00	140.97	0.1389299	0.1224069		-11.9	20
Vinyl acetate	A	160.00	130.82	0.6344058	0.5187031		-18.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>15FEB27.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV3</u>	Injection Time:	<u>16:10</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	22.100	1.889545	1.670489		-11.6	20
Bromobenzene	A	25.000	25.200	1.179324	1.18854		0.8	20
Bromochloromethane	A	25.000	24.650	0.1547174	0.1525773		-1.4	20
Bromodichloromethane	A	25.000	22.560	0.3292103	0.2971323		-9.7	20
Bromoform	A	25.000	25.260	0.3506939	0.3543148	0.1	1.0	20
Bromomethane	A	25.000	17.750	0.3180084	0.2258413		-29.0	20 *
n-Butylbenzene	A	25.000	23.690	3.493597	3.310912		-5.2	20
sec-Butylbenzene	A	25.000	22.300	5.379312	4.79856		-10.8	20
tert-Butylbenzene	A	25.000	24.890	3.852201	3.83521		-0.4	20
Carbon tetrachloride	A	25.000	23.180	0.4688551	0.4347066		-7.3	20
Chlorobenzene	A	25.000	25.150	2.978027	2.996371	0.3	0.6	20
Chloroethane	A	25.000	23.950	0.3902835	0.3738324		-4.2	20
Chloroform	A	25.000	22.280	0.7548469	0.6725775		-10.9	20
Chloromethane	L	25.000	24.290	0.6989857	0.614576	0.1	-2.8	20
2-Chlorotoluene	A	25.000	24.730	3.666018	3.626269		-1.1	20
4-Chlorotoluene	A	25.000	24.640	3.285453	3.238203		-1.4	20
Dibromochloromethane	A	25.000	24.030	0.1708407	0.1642181		-3.9	20
1,2-Dibromo-3-chloropropane	L	25.000	22.590	0.0666406	6.822546E-02		-9.6	20
1,2-Dibromoethane	A	25.000	24.610	0.1390115	0.1368327		-1.6	20
Dibromomethane	A	25.000	22.900	0.1132441	0.1037139		-8.4	20
1,2-Dichlorobenzene	A	25.000	24.170	1.693334	1.637156		-3.3	20
1,3-Dichlorobenzene	A	25.000	23.130	2.068389	1.913861		-7.5	20
1,4-Dichlorobenzene	A	25.000	25.330	1.916207	1.94119		1.3	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>15FEB27.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV3</u>	Injection Time:	<u>16:10</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	25.000	0.4765408	0.4764504		-0.02	20
1,1-Dichloroethane	A	25.000	20.580	1.030991	0.848677	0.1	-17.7	20
1,2-Dichloroethane	A	25.000	22.750	0.438219	0.3987119		-9.0	20
1,1-Dichloroethene	A	25.000	23.570	0.7766588	0.7321463		-5.7	20
cis-1,2-Dichloroethene	A	25.000	22.910	0.466668	0.4276405		-8.4	20
trans-1,2-Dichloroethene	A	25.000	22.750	0.4502706	0.4096788		-9.0	20
1,2-Dichloropropane	A	25.000	22.440	0.3723232	0.3342314		-10.2	20
1,3-Dichloropropane	A	25.000	23.180	0.2667047	0.2472472		-7.3	20
2,2-Dichloropropane	A	25.000	22.090	0.6461859	0.5710974		-11.6	20
1,1-Dichloropropene	A	25.000	21.990	0.61317	0.5394618		-12.0	20
cis-1,3-Dichloropropene	A	25.000	23.060	0.436368	0.4025837		-7.7	20
trans-1,3-Dichloropropene	A	25.000	23.660	0.3001727	0.2840746		-5.4	20
Ethylbenzene	A	25.000	24.790	1.699115	1.684686		-0.8	20
Hexachlorobutadiene	A	25.000	25.190	0.8012975	0.8074074		0.8	20
Isopropylbenzene	A	25.000	23.320	5.188549	4.839737		-6.7	20
p-Isopropyltoluene	A	25.000	23.080	4.064913	3.753074		-7.7	20
Methylene chloride	L	25.000	23.280	0.601454	0.3613329		-6.9	20
Methyl t-butyl ether	A	25.000	24.170	0.6285989	0.6078507		-3.3	20
Naphthalene	A	25.000	25.530	1.162765	1.187555		2.1	20
n-Propylbenzene	A	25.000	22.940	5.959786	5.46792		-8.3	20
Styrene	A	25.000	25.130	2.90027	2.915457		0.5	20
1,1,1,2-Tetrachloroethane	A	25.000	24.870	0.9261768	0.9212745		-0.5	20
1,1,2,2-Tetrachloroethane	A	25.000	24.010	0.555952	0.533907	0.3	-4.0	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>15FEB27.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV3</u>	Injection Time:	<u>16:10</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	24.130	0.3412463	0.3293978		-3.5	20
Toluene	A	25.000	23.150	0.7797766	0.7219903		-7.4	20
1,2,3-Trichlorobenzene	A	25.000	25.560	1.02527	1.048304		2.2	20
1,2,4-Trichlorobenzene	A	25.000	26.140	1.194842	1.249507		4.6	20
1,1,1-Trichloroethane	A	25.000	21.870	0.6397625	0.5597859		-12.5	20
1,1,2-Trichloroethane	A	25.000	23.310	0.1533095	0.142963		-6.7	20
Trichloroethene	A	25.000	24.070	0.3255704	0.3134861		-3.7	20
Trichlorofluoromethane	A	25.000	24.630	0.5867905	0.5780037		-1.5	20
1,2,3-Trichloropropane	L	25.000	26.340	0.105337	0.1151889		5.4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.680	0.4183029	0.3794968		-9.3	20
1,2,4-Trimethylbenzene	A	25.000	24.650	3.597754	3.547363		-1.4	20
1,3,5-Trimethylbenzene	A	25.000	22.920	3.970515	3.640205		-8.3	20
Vinyl chloride	A	25.000	25.870	0.5958562	0.6165264		3.5	20
Total Xylenes	A	75.000	73.520	1.988127	1.949376		-1.9	20
p- & m-Xylenes	A	50.000	49.350	2.011739	1.985675		-1.3	20
o-Xylene	A	25.000	24.170	1.940902	1.87678		-3.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>15FEB28.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702674</u>	Injection Date:	<u>02/15/17</u>
Lab Sample ID:	<u>1702674-CCV4</u>	Injection Time:	<u>16:34</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	369.08	0.044841	5.171901E-02		15.3	20
Acetonitrile	L	160.00	203.36	1.965066E-02	2.084106E-02		27.1	20 *
Allyl chloride	A	32.000	26.940	1.114402	0.9382453		-15.8	20
t-Amyl Methyl ether	A	16.000	15.360	0.7281162	0.6991959		-4.0	20
Benzyl chloride	A	32.000	25.760	0.8656921	0.6968776		-19.5	20
t-Butyl alcohol	A	800.00	794.88	1.280474E-02	1.272273E-02		-0.6	20
Carbon disulfide	A	32.000	27.720	1.344744	1.164934		-13.4	20
Chloroprene	A	32.000	27.060	1.000946	0.8463304		-15.4	20
Diisopropyl ether	A	16.000	16.330	0.3174881	0.3239729		2.0	20
Ethyl t-butyl ether	A	16.000	14.740	1.311089	1.20775		-7.9	20
2-Hexanone	Q	320.00	310.52	0.0923643	8.561627E-02		-3.0	20
Methyl ethyl ketone	A	160.00	161.51	0.0879739	8.880241E-02		0.9	20
Methyl isobutyl ketone	A	160.00	148.68	0.1389299	0.1290968		-7.1	20
Vinyl acetate	A	160.00	142.65	0.6344058	0.5656098		-10.8	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>26JAN15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>01/26/17</u>
Lab Sample ID:	<u>1702721-ICV1</u>	Injection Time:	<u>19:35</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	24.520	1.889545	1.853263		-1.9	20
Bromobenzene	A	25.000	26.750	1.179324	1.261962		7.0	20
Bromochloromethane	A	25.000	27.870	0.1547174	0.1724858		11.5	20
Bromodichloromethane	A	25.000	26.320	0.3292103	0.3466539		5.3	20
Bromoform	A	25.000	29.540	0.3506939	0.4143899	0.1	18.2	20
Bromomethane	A	25.000	25.400	0.3180084	0.323081		1.6	20
n-Butylbenzene	A	25.000	24.450	3.493597	3.416282		-2.2	20
sec-Butylbenzene	A	25.000	22.320	5.379312	4.803427		-10.7	20
tert-Butylbenzene	A	25.000	24.540	3.852201	3.780801		-1.9	20
Carbon tetrachloride	A	25.000	24.550	0.4688551	0.4604308		-1.8	20
Chlorobenzene	A	25.000	25.550	2.978027	3.04388	0.3	2.2	20
Chloroethane	A	25.000	25.010	0.3902835	0.3904325		0.04	20
Chloroform	A	25.000	25.080	0.7548469	0.7572197		0.3	20
Chloromethane	L	25.000	21.450	0.6989857	0.5449247	0.1	-14.2	20
2-Chlorotoluene	A	25.000	25.230	3.666018	3.699401		0.9	20
4-Chlorotoluene	A	25.000	25.250	3.285453	3.318671		1.0	20
Dibromochloromethane	A	25.000	28.210	0.1708407	0.1927603		12.8	20
1,2-Dibromo-3-chloropropane	L	25.000	26.780	0.0666406	0.0808198		7.1	20
1,2-Dibromoethane	A	25.000	28.160	0.1390115	0.1565905		12.6	20
Dibromomethane	A	25.000	25.600	0.1132441	0.1159592		2.4	20
1,2-Dichlorobenzene	A	25.000	25.120	1.693334	1.701651		0.5	20
1,3-Dichlorobenzene	A	25.000	23.440	2.068389	1.939285		-6.2	20
1,4-Dichlorobenzene	A	25.000	25.950	1.916207	1.989058		3.8	20



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EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>26JAN15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>01/26/17</u>
Lab Sample ID:	<u>1702721-ICV1</u>	Injection Time:	<u>19:35</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	23.190	0.4765408	0.4420548		-7.2	20
1,1-Dichloroethane	A	25.000	25.000	1.030991	1.031141	0.1	0.01	20
1,2-Dichloroethane	A	25.000	26.060	0.438219	0.4568204		4.2	20
1,1-Dichloroethene	A	25.000	24.850	0.7766588	0.7719666		-0.6	20
cis-1,2-Dichloroethene	A	25.000	25.440	0.46668	0.474977		1.8	20
trans-1,2-Dichloroethene	A	25.000	23.910	0.4502706	0.4305847		-4.4	20
1,2-Dichloropropane	A	25.000	25.240	0.3723232	0.3758662		1.0	20
1,3-Dichloropropane	A	25.000	27.900	0.2667047	0.2976682		11.6	20
2,2-Dichloropropane	A	25.000	23.050	0.6461859	0.595668		-7.8	20
1,1-Dichloropropene	A	25.000	24.340	0.61317	0.5969539		-2.6	20
cis-1,3-Dichloropropene	A	25.000	25.890	0.436368	0.4519754		3.6	20
trans-1,3-Dichloropropene	A	25.000	27.510	0.3001727	0.3303126		10.0	20
Ethylbenzene	A	25.000	24.810	1.699115	1.686003		-0.8	20
Hexachlorobutadiene	A	25.000	22.520	0.8012975	0.7218586		-9.9	20
Isopropylbenzene	A	25.000	23.670	5.188549	4.913541		-5.3	20
p-Isopropyltoluene	A	25.000	22.960	4.064913	3.733001		-8.2	20
Methylene chloride	L	25.000	27.090	0.601454	0.4144394		8.4	20
Methyl t-butyl ether	A	25.000	29.040	0.6285989	0.7300879		16.1	20
Naphthalene	A	25.000	28.850	1.162765	1.341925		15.4	20
n-Propylbenzene	A	25.000	23.210	5.959786	5.533521		-7.2	20
Styrene	A	25.000	26.030	2.90027	3.020175		4.1	20
1,1,1,2-Tetrachloroethane	A	25.000	25.800	0.9261768	0.9556971		3.2	20
1,1,2,2-Tetrachloroethane	A	25.000	28.950	0.555952	0.6436956	0.3	15.8	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>26JAN15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>01/26/17</u>
Lab Sample ID:	<u>1702721-ICV1</u>	Injection Time:	<u>19:35</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	23.430	0.3412463	0.3197576		-6.3	20
Toluene	A	25.000	24.190	0.7797766	0.7546079		-3.2	20
1,2,3-Trichlorobenzene	A	25.000	26.710	1.02527	1.095334		6.8	20
1,2,4-Trichlorobenzene	A	25.000	26.280	1.194842	1.256226		5.1	20
1,1,1-Trichloroethane	A	25.000	24.320	0.6397625	0.6223499		-2.7	20
1,1,2-Trichloroethane	A	25.000	28.140	0.1533095	0.1725615		12.6	20
Trichloroethene	A	25.000	25.380	0.3255704	0.3305227		1.5	20
Trichlorofluoromethane	A	25.000	23.360	0.5867905	0.5482351		-6.6	20
1,2,3-Trichloropropane	L	25.000	29.760	0.105337	0.1291837		19.0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.390	0.4183029	0.3745928		-10.4	20
1,2,4-Trimethylbenzene	A	25.000	24.970	3.597754	3.593467		-0.1	20
1,3,5-Trimethylbenzene	A	25.000	23.180	3.970515	3.680896		-7.3	20
Vinyl chloride	A	25.000	20.170	0.5958562	0.4807637		-19.3	20
Total Xylenes	A	75.000	74.270	1.988127	1.96886		-1.0	20
p- & m-Xylenes	A	50.000	49.530	2.011739	1.992895		-0.9	20
o-Xylene	A	25.000	24.740	1.940902	1.920791		-1.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>07FEB15.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/07/17</u>
Lab Sample ID:	<u>1702721-ICV2</u>	Injection Time:	<u>12:46</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	315.03	0.044841	4.414517E-02		-1.6	20
Acetonitrile	L	160.00	201.66	1.965066E-02	2.067974E-02		26.0	20 *
Allyl chloride	A	32.000	31.180	1.114402	1.08574		-2.6	20
t-Amyl Methyl ether	A	16.000	15.090	0.7281162	0.6866905		-5.7	20
Benzyl chloride	A	32.000	31.760	0.8656921	0.8592213		-0.7	20
t-Butyl alcohol	A	800.00	811.29	1.280474E-02	1.298544E-02		1.4	20
Carbon disulfide	A	32.000	32.220	1.344744	1.354047		0.7	20
Chloroprene	A	32.000	31.360	1.000946	0.9807911		-2.0	20
Diisopropyl ether	A	16.000	15.550	0.3174881	0.3085884		-2.8	20
Ethyl t-butyl ether	A	16.000	15.050	1.311089	1.233435		-5.9	20
2-Hexanone	Q	320.00	312.86	0.0923643	8.615645E-02		-2.2	20
Methyl ethyl ketone	A	160.00	154.88	0.0879739	0.0851614		-3.2	20
Methyl isobutyl ketone	A	160.00	147.91	0.1389299	0.12843		-7.6	20
Vinyl acetate	A	160.00	147.71	0.6344058	0.5856918		-7.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB03.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV1</u>	Injection Time:	<u>08:12</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	21.840	1.889545	1.65045		-12.7	20
Bromobenzene	A	25.000	24.370	1.179324	1.149824		-2.5	20
Bromochloromethane	A	25.000	24.240	0.1547174	0.1500242		-3.0	20
Bromodichloromethane	A	25.000	23.520	0.3292103	0.3097609		-5.9	20
Bromoform	A	25.000	24.600	0.3506939	0.3451377	0.1	-1.6	20
Bromomethane	A	25.000	17.530	0.3180084	0.2229918		-29.9	20 *
n-Butylbenzene	A	25.000	21.940	3.493597	3.065585		-12.3	20
sec-Butylbenzene	A	25.000	21.280	5.379312	4.578795		-14.9	20
tert-Butylbenzene	A	25.000	24.330	3.852201	3.749341		-2.7	20
Carbon tetrachloride	A	25.000	22.740	0.4688551	0.4264338		-9.0	20
Chlorobenzene	A	25.000	24.360	2.978027	2.901645	0.3	-2.6	20
Chloroethane	A	25.000	24.070	0.3902835	0.3757821		-3.7	20
Chloroform	A	25.000	22.570	0.7548469	0.6814767		-9.7	20
Chloromethane	L	25.000	24.470	0.6989857	0.6189978	0.1	-2.1	20
2-Chlorotoluene	A	25.000	23.880	3.666018	3.501387		-4.5	20
4-Chlorotoluene	A	25.000	23.650	3.285453	3.107633		-5.4	20
Dibromochloromethane	A	25.000	24.610	0.1708407	0.1682002		-1.5	20
1,2-Dibromo-3-chloropropane	L	25.000	23.190	0.0666406	7.004316E-02		-7.2	20
1,2-Dibromoethane	A	25.000	24.250	0.1390115	0.1348455		-3.0	20
Dibromomethane	A	25.000	22.690	0.1132441	0.1027952		-9.2	20
1,2-Dichlorobenzene	A	25.000	22.610	1.693334	1.531256		-9.6	20
1,3-Dichlorobenzene	A	25.000	21.840	2.068389	1.807051		-12.6	20
1,4-Dichlorobenzene	A	25.000	23.420	1.916207	1.795038		-6.3	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB03.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV1</u>	Injection Time:	<u>08:12</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	23.970	0.4765408	0.4568269		-4.1	20
1,1-Dichloroethane	A	25.000	20.990	1.030991	0.8654386	0.1	-16.1	20
1,2-Dichloroethane	A	25.000	22.640	0.438219	0.3968137		-9.4	20
1,1-Dichloroethene	A	25.000	23.040	0.7766588	0.7157301		-7.8	20
cis-1,2-Dichloroethene	A	25.000	23.390	0.46668	0.4366862		-6.4	20
trans-1,2-Dichloroethene	A	25.000	22.660	0.4502706	0.4081934		-9.3	20
1,2-Dichloropropane	A	25.000	21.980	0.3723232	0.3273418		-12.1	20
1,3-Dichloropropane	A	25.000	22.790	0.2667047	0.2431693		-8.8	20
2,2-Dichloropropane	A	25.000	22.650	0.6461859	0.5855463		-9.4	20
1,1-Dichloropropene	A	25.000	21.600	0.61317	0.5297073		-13.6	20
cis-1,3-Dichloropropene	A	25.000	23.630	0.436368	0.4125334		-5.5	20
trans-1,3-Dichloropropene	A	25.000	23.480	0.3001727	0.2819533		-6.1	20
Ethylbenzene	A	25.000	23.040	1.699115	1.565711		-7.9	20
Hexachlorobutadiene	A	25.000	24.610	0.8012975	0.7888472		-1.6	20
Isopropylbenzene	A	25.000	22.190	5.188549	4.605983		-11.2	20
p-Isopropyltoluene	A	25.000	21.730	4.064913	3.533783		-13.1	20
Methylene chloride	L	25.000	23.790	0.601454	0.3684603		-4.8	20
Methyl t-butyl ether	A	25.000	25.270	0.6285989	0.6353807		1.1	20
Naphthalene	A	25.000	24.510	1.162765	1.14006		-2.0	20
n-Propylbenzene	A	25.000	21.680	5.959786	5.167651		-13.3	20
Styrene	A	25.000	24.750	2.90027	2.871817		-1.0	20
1,1,1,2-Tetrachloroethane	A	25.000	23.700	0.9261768	0.8781408		-5.2	20
1,1,2,2-Tetrachloroethane	A	25.000	23.080	0.555952	0.5131831	0.3	-7.7	20



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EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB03.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV1</u>	Injection Time:	<u>08:12</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	23.030	0.3412463	0.3143783		-7.9	20
Toluene	A	25.000	22.160	0.7797766	0.6911624		-11.4	20
1,2,3-Trichlorobenzene	A	25.000	24.250	1.02527	0.9945689		-3.0	20
1,2,4-Trichlorobenzene	A	25.000	24.760	1.194842	1.183478		-1.0	20
1,1,1-Trichloroethane	A	25.000	21.850	0.6397625	0.5592791		-12.6	20
1,1,2-Trichloroethane	A	25.000	22.890	0.1533095	0.1403883		-8.4	20
Trichloroethene	A	25.000	24.050	0.3255704	0.31323		-3.8	20
Trichlorofluoromethane	A	25.000	24.480	0.5867905	0.5746489		-2.1	20
1,2,3-Trichloropropane	L	25.000	28.230	0.105337	0.1229478		12.9	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.070	0.4183029	0.3693591		-11.7	20
1,2,4-Trimethylbenzene	A	25.000	23.450	3.597754	3.375081		-6.2	20
1,3,5-Trimethylbenzene	A	25.000	22.180	3.970515	3.521901		-11.3	20
Vinyl chloride	A	25.000	24.980	0.5958562	0.5952757		-0.1	20
Total Xylenes	A	75.000	68.570	1.988127	1.8169		-8.6	20
p- & m-Xylenes	A	50.000	44.740	2.011739	1.800214		-10.5	20
o-Xylene	A	25.000	23.830	1.940902	1.850274		-4.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB06.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV2</u>	Injection Time:	<u>09:21</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	338.14	0.044841	4.738231E-02		5.7	20
Acetonitrile	L	160.00	193.53	1.965066E-02	1.990665E-02		21.0	20 *
Allyl chloride	A	32.000	28.520	1.114402	0.9933531		-10.9	20
t-Amyl Methyl ether	A	16.000	13.570	0.7281162	0.6176969		-15.2	20
Benzyl chloride	A	32.000	29.950	0.8656921	0.8102864		-6.4	20
t-Butyl alcohol	A	800.00	697.06	1.280474E-02	1.115715E-02		-12.9	20
Carbon disulfide	A	32.000	28.650	1.344744	1.203888		-10.5	20
Chloroprene	A	32.000	27.860	1.000946	0.871517		-12.9	20
Diisopropyl ether	A	16.000	15.200	0.3174881	0.301521		-5.0	20
Ethyl t-butyl ether	A	16.000	13.080	1.311089	1.072121		-18.2	20
2-Hexanone	Q	320.00	292.05	0.0923643	8.130257E-02		-8.7	20
Methyl ethyl ketone	A	160.00	148.20	0.0879739	8.148539E-02		-7.4	20
Methyl isobutyl ketone	A	160.00	143.67	0.1389299	0.1247533		-10.2	20
Vinyl acetate	A	160.00	135.82	0.6344058	0.538544		-15.1	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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San Diego, CA 92123

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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB33.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV3</u>	Injection Time:	<u>19:47</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	21.660	1.889545	1.637022		-13.4	20
Bromobenzene	A	25.000	24.170	1.179324	1.140361		-3.3	20
Bromochloromethane	A	25.000	24.950	0.1547174	0.1543811		-0.2	20
Bromodichloromethane	A	25.000	24.220	0.3292103	0.3189159		-3.1	20
Bromoform	A	25.000	25.080	0.3506939	0.3517738	0.1	0.3	20
Bromomethane	A	25.000	16.100	0.3180084	0.2047982		-35.6	20 *
n-Butylbenzene	A	25.000	22.240	3.493597	3.10779		-11.0	20
sec-Butylbenzene	A	25.000	21.020	5.379312	4.522085		-15.9	20
tert-Butylbenzene	A	25.000	23.100	3.852201	3.559879		-7.6	20
Carbon tetrachloride	A	25.000	22.890	0.4688551	0.429232		-8.5	20
Chlorobenzene	A	25.000	23.380	2.978027	2.785348	0.3	-6.5	20
Chloroethane	A	25.000	22.720	0.3902835	0.3546606		-9.1	20
Chloroform	A	25.000	22.170	0.7548469	0.6692819		-11.3	20
Chloromethane	L	25.000	22.430	0.6989857	0.5690358	0.1	-10.3	20
2-Chlorotoluene	A	25.000	23.520	3.666018	3.449504		-5.9	20
4-Chlorotoluene	A	25.000	22.610	3.285453	2.971111		-9.6	20
Dibromochloromethane	A	25.000	25.600	0.1708407	0.1749722		2.4	20
1,2-Dibromo-3-chloropropane	L	25.000	22.560	0.0666406	6.813514E-02		-9.8	20
1,2-Dibromoethane	A	25.000	26.080	0.1390115	0.1450019		4.3	20
Dibromomethane	A	25.000	23.810	0.1132441	0.1078407		-4.8	20
1,2-Dichlorobenzene	A	25.000	23.320	1.693334	1.579624		-6.7	20
1,3-Dichlorobenzene	A	25.000	21.380	2.068389	1.76908		-14.5	20
1,4-Dichlorobenzene	A	25.000	23.460	1.916207	1.79836		-6.2	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB33.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV3</u>	Injection Time:	<u>19:47</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	24.580	0.4765408	0.4685691		-1.7	20
1,1-Dichloroethane	A	25.000	20.440	1.030991	0.8428789	0.1	-18.2	20
1,2-Dichloroethane	A	25.000	23.210	0.438219	0.4068941		-7.1	20
1,1-Dichloroethene	A	25.000	23.140	0.7766588	0.7188266		-7.4	20
cis-1,2-Dichloroethene	A	25.000	23.210	0.46668	0.4332226		-7.2	20
trans-1,2-Dichloroethene	A	25.000	22.130	0.4502706	0.3984951		-11.5	20
1,2-Dichloropropane	A	25.000	22.790	0.3723232	0.339433		-8.8	20
1,3-Dichloropropane	A	25.000	23.450	0.2667047	0.25013		-6.2	20
2,2-Dichloropropane	A	25.000	20.780	0.6461859	0.5370105		-16.9	20
1,1-Dichloropropene	A	25.000	21.900	0.61317	0.537233		-12.4	20
cis-1,3-Dichloropropene	A	25.000	23.050	0.436368	0.402416		-7.8	20
trans-1,3-Dichloropropene	A	25.000	25.100	0.3001727	0.3014108		0.4	20
Ethylbenzene	A	25.000	22.570	1.699115	1.533814		-9.7	20
Hexachlorobutadiene	A	25.000	24.710	0.8012975	0.791866		-1.2	20
Isopropylbenzene	A	25.000	22.370	5.188549	4.641872		-10.5	20
p-Isopropyltoluene	A	25.000	20.900	4.064913	3.3978		-16.4	20
Methylene chloride	L	25.000	23.660	0.601454	0.3666362		-5.4	20
Methyl t-butyl ether	A	25.000	24.440	0.6285989	0.6144158		-2.3	20
Naphthalene	A	25.000	25.380	1.162765	1.180476		1.5	20
n-Propylbenzene	A	25.000	21.450	5.959786	5.114307		-14.2	20
Styrene	A	25.000	24.160	2.90027	2.802427		-3.4	20
1,1,1,2-Tetrachloroethane	A	25.000	23.930	0.9261768	0.886457		-4.3	20
1,1,2,2-Tetrachloroethane	A	25.000	22.850	0.555952	0.5081923	0.3	-8.6	20



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EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB33.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV3</u>	Injection Time:	<u>19:47</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	24.360	0.3412463	0.3324997		-2.6	20
Toluene	A	25.000	24.220	0.7797766	0.7555532		-3.1	20
1,2,3-Trichlorobenzene	A	25.000	24.780	1.02527	1.01632		-0.9	20
1,2,4-Trichlorobenzene	A	25.000	24.990	1.194842	1.1942		-0.05	20
1,1,1-Trichloroethane	A	25.000	21.880	0.6397625	0.5600236		-12.5	20
1,1,2-Trichloroethane	A	25.000	25.050	0.1533095	0.1536001		0.2	20
Trichloroethene	A	25.000	24.410	0.3255704	0.3178757		-2.4	20
Trichlorofluoromethane	A	25.000	24.550	0.5867905	0.5762064		-1.8	20
1,2,3-Trichloropropane	L	25.000	25.800	0.105337	0.112977		3.2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.110	0.4183029	0.3698975		-11.6	20
1,2,4-Trimethylbenzene	A	25.000	22.850	3.597754	3.288248		-8.6	20
1,3,5-Trimethylbenzene	A	25.000	21.410	3.970515	3.400111		-14.4	20
Vinyl chloride	A	25.000	25.010	0.5958562	0.5961613		0.05	20
Total Xylenes	A	75.000	68.590	1.988127	1.818425		-8.5	20
p- & m-Xylenes	A	50.000	45.930	2.011739	1.848039		-8.1	20
o-Xylene	A	25.000	22.660	1.940902	1.759196		-9.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure
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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1702011</u>
Lab File ID:	<u>16FEB34.D</u>	Calibration Date:	<u>01/26/17 17:00</u>
Sequence:	<u>1702721</u>	Injection Date:	<u>02/16/17</u>
Lab Sample ID:	<u>1702721-CCV4</u>	Injection Time:	<u>20:10</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	347.60	0.044841	4.870874E-02		8.6	20
Acetonitrile	L	160.00	197.41	1.965066E-02	2.027518E-02		23.4	20 *
Allyl chloride	A	32.000	27.000	1.114402	0.9401586		-15.6	20
t-Amyl Methyl ether	A	16.000	14.870	0.7281162	0.6768471		-7.0	20
Benzyl chloride	A	32.000	24.510	0.8656921	0.6631884		-23.4	20 *
t-Butyl alcohol	A	800.00	722.25	1.280474E-02	1.156035E-02		-9.7	20
Carbon disulfide	A	32.000	27.370	1.344744	1.150008		-14.5	20
Chloroprene	A	32.000	26.860	1.000946	0.840273		-16.1	20
Diisopropyl ether	A	16.000	14.840	0.3174881	0.2943988		-7.3	20
Ethyl t-butyl ether	A	16.000	14.150	1.311089	1.159104		-11.6	20
2-Hexanone	Q	320.00	301.47	0.0923643	8.351238E-02		-5.8	20
Methyl ethyl ketone	A	160.00	146.27	0.0879739	8.042377E-02		-8.6	20
Methyl isobutyl ketone	A	160.00	147.89	0.1389299	0.1284115		-7.6	20
Vinyl acetate	A	160.00	136.06	0.6344058	0.5394714		-15.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702048</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Cal Standard (1702048-CAL1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.6		6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	95.5		8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	88.4		10.35	10.355	-0.0050	+/-1.0	
Cal Standard (1702048-CAL2)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.3		6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.1		8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	90.4		10.36	10.355	0.0050	+/-1.0	
Cal Standard (1702048-CAL3)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	103		6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.8		8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.0		10.36	10.355	0.0050	+/-1.0	
Cal Standard (1702048-CAL5)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	97.1		6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.2		8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	93.3		10.35	10.355	-0.0050	+/-1.0	
Cal Standard (1702048-CAL6)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	86.6		6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	93.4		8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	89.5		10.35	10.355	-0.0050	+/-1.0	
Cal Standard (1702048-CAL4)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	106		6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	102		8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102		10.36	10.355	0.0050	+/-1.0	



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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702674</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (1702674-ICV1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	108	85 - 114	10.36	10.355	0.0050	+/-1.0	
Initial Cal Blank (1702674-ICB1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	113	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Check (1702674-CCV1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	93.0	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.4	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Blank (1702674-CCB1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	91.5	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Blank (B B1276-BLK1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.3	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	93.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	92.3	85 - 114	10.35	10.355	-0.0050	+/-1.0	
DUP09_170208 (1703604-01)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	108	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	103	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.1	85 - 114	10.35	10.355	-0.0050	+/-1.0	
M03-16_170208 (1703604-02)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	114	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.4	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.1	85 - 114	10.35	10.355	-0.0050	+/-1.0	



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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702674</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
S11-TT-MW04B_170208 (1703604-03)					Lab File ID: 15FEB04.D	Analyzed: 02/15/17 07:17		
1,2-Dichloroethane-d4 (Surrogate)	10.000	114	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.6	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.7	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW04D_170208 (1703604-05)					Lab File ID: 15FEB06.D	Analyzed: 02/15/17 08:03		
1,2-Dichloroethane-d4 (Surrogate)	10.000	127	81 - 118	6.93	6.921667	0.0083	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	97.5	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW04E_170208 (1703604-06)					Lab File ID: 15FEB07.D	Analyzed: 02/15/17 08:27		
1,2-Dichloroethane-d4 (Surrogate)	10.000	122	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	98.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.0	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW02A_170208 (1703604-07)					Lab File ID: 15FEB08.D	Analyzed: 02/15/17 08:50		
1,2-Dichloroethane-d4 (Surrogate)	10.000	111	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	106	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW02B_170208 (1703604-08)					Lab File ID: 15FEB09.D	Analyzed: 02/15/17 09:13		
1,2-Dichloroethane-d4 (Surrogate)	10.000	120	81 - 118	6.93	6.921667	0.0083	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	98.5	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW02D_170208 (1703604-10)					Lab File ID: 15FEB11.D	Analyzed: 02/15/17 09:59		
1,2-Dichloroethane-d4 (Surrogate)	10.000	120	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	95.5	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103	85 - 114	10.35	10.355	-0.0050	+/-1.0	
DUP09_170208 (1703604-01RE1)					Lab File ID: 15FEB12.D	Analyzed: 02/15/17 10:22		
1,2-Dichloroethane-d4 (Surrogate)	10.000	110	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	95.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.8	85 - 114	10.35	10.355	-0.0050	+/-1.0	



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702674</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
M03-16_170208 (1703604-02RE1)					Lab File ID: 15FEB13.D	Analyzed: 02/15/17 10:46		
1,2-Dichloroethane-d4 (Surrogate)	10.000	109	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.8	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW04C_170208 (1703604-04)					Lab File ID: 15FEB14.D	Analyzed: 02/15/17 11:09		
1,2-Dichloroethane-d4 (Surrogate)	10.000	130	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	93.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.3	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW02C_170208 (1703604-09)					Lab File ID: 15FEB15.D	Analyzed: 02/15/17 11:32		
1,2-Dichloroethane-d4 (Surrogate)	10.000	122	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.6	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW02E_170208 (1703604-11)					Lab File ID: 15FEB16.D	Analyzed: 02/15/17 11:55		
1,2-Dichloroethane-d4 (Surrogate)	10.000	109	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.0	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.2	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW03E_170208 (1703604-12)					Lab File ID: 15FEB17.D	Analyzed: 02/15/17 12:19		
1,2-Dichloroethane-d4 (Surrogate)	10.000	130	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	99.6	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW03B_170208 (1703604-13)					Lab File ID: 15FEB18.D	Analyzed: 02/15/17 12:42		
1,2-Dichloroethane-d4 (Surrogate)	10.000	107	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	95.4	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.8	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW04B_170208 (1703604-03RE1)					Lab File ID: 15FEB19.D	Analyzed: 02/15/17 13:05		
1,2-Dichloroethane-d4 (Surrogate)	10.000	110	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.9	85 - 114	10.35	10.355	-0.0050	+/-1.0	



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702674</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
S21-TT-MW02B_170208 (1703604-08RE1)					Lab File ID: 15FEB21.D	Analyzed: 02/15/17 13:51		
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.5	85 - 114	10.35	10.355	-0.0050	+/-1.0	
LCS (B B1276-BS1)					Lab File ID: 15FEB22.D	Analyzed: 02/15/17 14:15		
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.6	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Matrix Spike (B B1276-MS1)					Lab File ID: 15FEB23.D	Analyzed: 02/15/17 14:38		
1,2-Dichloroethane-d4 (Surrogate)	10.000	122	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	98.5	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Matrix Spike Dup (B B1276-MSD1)					Lab File ID: 15FEB24.D	Analyzed: 02/15/17 15:01		
1,2-Dichloroethane-d4 (Surrogate)	10.000	118	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.7	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Check (1702674-CCV3)					Lab File ID: 15FEB27.D	Analyzed: 02/15/17 16:10		
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Blank (1702674-CCB2)					Lab File ID: 15FEB29.D	Analyzed: 02/15/17 16:57		
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.4	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.0	85 - 114	10.35	10.355	-0.0050	+/-1.0	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702721</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (1702721-ICV1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	108	85 - 114	10.36	10.355	0.0050	+/-1.0	
Initial Cal Blank (1702721-ICB1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	113	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Check (1702721-CCV1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.1	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Blank (1702721-CCB1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	93.8	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.6	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Blank (B B1418-BLK1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	97.8	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.6	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	91.7	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW03C_170208 (1703604-14)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	109	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	95.2	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.0	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW03D_170208 (1703604-15)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	109	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	93.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.3	85 - 114	10.35	10.355	-0.0050	+/-1.0	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702721</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
S11-TT-MW03E_170208 (1703604-16)					Lab File ID: 16FEB11.D	Analyzed: 02/16/17 11:17		
1,2-Dichloroethane-d4 (Surrogate)	10.000	112	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	92.0	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW04A_170208 (1703604-17)					Lab File ID: 16FEB12.D	Analyzed: 02/16/17 11:41		
1,2-Dichloroethane-d4 (Surrogate)	10.000	111	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.3	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW05D_170208 (1703604-18)					Lab File ID: 16FEB13.D	Analyzed: 02/16/17 12:04		
1,2-Dichloroethane-d4 (Surrogate)	10.000	116	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW05E_170208 (1703604-19)					Lab File ID: 16FEB14.D	Analyzed: 02/16/17 12:27		
1,2-Dichloroethane-d4 (Surrogate)	10.000	120	81 - 118	6.93	6.921667	0.0083	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	97.0	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.8	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW03A_170208 (1703604-20)					Lab File ID: 16FEB15.D	Analyzed: 02/16/17 12:51		
1,2-Dichloroethane-d4 (Surrogate)	10.000	118	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.7	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.6	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW03B_170208 (1703604-21)					Lab File ID: 16FEB16.D	Analyzed: 02/16/17 13:14		
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.0	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	91.9	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW03C_170208 (1703604-22)					Lab File ID: 16FEB17.D	Analyzed: 02/16/17 13:37		
1,2-Dichloroethane-d4 (Surrogate)	10.000	115	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.5	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.5	85 - 114	10.35	10.355	-0.0050	+/-1.0	



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702721</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
S21-TT-MW03D_170208 (1703604-23)					Lab File ID: 16FEB18.D	Analyzed: 02/16/17 14:00		
1,2-Dichloroethane-d4 (Surrogate)	10.000	124	81 - 118	6.92	6.921667	-0.0017	+/-1.0	*
Toluene-d8 (Surrogate)	10.000	96.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	93.1	85 - 114	10.35	10.355	-0.0050	+/-1.0	
TB16_170208 (1703604-24)					Lab File ID: 16FEB19.D	Analyzed: 02/16/17 14:23		
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.93	6.921667	0.0083	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.8	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.7	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S21-TT-MW02A_170208 (1703604-07RE1)					Lab File ID: 16FEB20.D	Analyzed: 02/16/17 14:46		
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.0	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.9	85 - 114	10.35	10.355	-0.0050	+/-1.0	
LCS (B B1418-BS1)					Lab File ID: 16FEB22.D	Analyzed: 02/16/17 15:33		
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.2	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.2	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.4	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Matrix Spike (B B1418-MS1)					Lab File ID: 16FEB23.D	Analyzed: 02/16/17 15:56		
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.4	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	100	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Matrix Spike Dup (B B1418-MSD1)					Lab File ID: 16FEB24.D	Analyzed: 02/16/17 16:19		
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.6	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.2	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW04A_170208 (1703604-17RE1)					Lab File ID: 16FEB26.D	Analyzed: 02/16/17 17:05		
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.8	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	89.9	85 - 114	10.35	10.355	-0.0050	+/-1.0	



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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702721</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
EB30_170208 (1703604-25)					Lab File ID: 16FEB27.D	Analyzed: 02/16/17 17:28		
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.3	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.6	85 - 114	10.35	10.355	-0.0050	+/-1.0	
EB31_170208 (1703604-26)					Lab File ID: 16FEB28.D	Analyzed: 02/16/17 17:51		
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.4	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.8	85 - 114	10.35	10.355	-0.0050	+/-1.0	
EB32_170208 (1703604-27)					Lab File ID: 16FEB29.D	Analyzed: 02/16/17 18:14		
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.1	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.9	85 - 114	10.35	10.355	-0.0050	+/-1.0	
S11-TT-MW03A_170208 (1703604-28)					Lab File ID: 16FEB30.D	Analyzed: 02/16/17 18:38		
1,2-Dichloroethane-d4 (Surrogate)	10.000	110	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	92.9	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	92.9	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Check (1702721-CCV3)					Lab File ID: 16FEB33.D	Analyzed: 02/16/17 19:47		
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.0	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	101	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.3	85 - 114	10.35	10.355	-0.0050	+/-1.0	
Calibration Blank (1702721-CCB2)					Lab File ID: 16FEB35.D	Analyzed: 02/16/17 20:33		
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.4	81 - 118	6.92	6.921667	-0.0017	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.2	89 - 112	8.61	8.61	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	91.5	85 - 114	10.35	10.355	-0.0050	+/-1.0	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702048</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1702048-CALD)			Lab File ID: 13DEC06.D			Analyzed: 12/13/16 10:10			
Pentafluorobenzene (IS)	179698	6.71	210237	6.59	85	50 - 200	0.1200	+/-0.50	
Cal Standard (1702048-CALE)			Lab File ID: 13DEC07.D			Analyzed: 12/13/16 10:32			
Pentafluorobenzene (IS)	181927	6.7	210237	6.59	87	50 - 200	0.1100	+/-0.50	
Cal Standard (1702048-CALF)			Lab File ID: 13DEC08.D			Analyzed: 12/13/16 10:55			
Pentafluorobenzene (IS)	182850	6.7	210237	6.59	87	50 - 200	0.1100	+/-0.50	
Cal Standard (1702048-CALG)			Lab File ID: 13DEC09.D			Analyzed: 12/13/16 11:18			
Pentafluorobenzene (IS)	175456	6.7	210237	6.59	83	50 - 200	0.1100	+/-0.50	
Cal Standard (1702048-CALH)			Lab File ID: 13DEC10.D			Analyzed: 12/13/16 11:41			
Pentafluorobenzene (IS)	178003	6.7	210237	6.59	85	50 - 200	0.1100	+/-0.50	
Cal Standard (1702048-CALI)			Lab File ID: 13DEC11.D			Analyzed: 12/13/16 12:04			
Pentafluorobenzene (IS)	180722	6.71	210237	6.59	86	50 - 200	0.1200	+/-0.50	
Cal Standard (1702048-CAL1)			Lab File ID: 26JAN06.D			Analyzed: 01/26/17 16:07			
Pentafluorobenzene (IS)	220247	6.58	210237	6.59	105	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74437	9.62	76990	9.62	97	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	307137	7.39	296345	7.39	104	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL2)			Lab File ID: 26JAN07.D			Analyzed: 01/26/17 16:30			
Pentafluorobenzene (IS)	220154	6.58	210237	6.59	105	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72326	9.62	76990	9.62	94	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	293817	7.39	296345	7.39	99	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL3)			Lab File ID: 26JAN08.D			Analyzed: 01/26/17 16:53			
Pentafluorobenzene (IS)	205618	6.58	210237	6.59	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69095	9.62	76990	9.62	90	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	296048	7.39	296345	7.39	100	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL5)			Lab File ID: 26JAN10.D			Analyzed: 01/26/17 17:39			
Pentafluorobenzene (IS)	205022	6.58	210237	6.59	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	71070	9.63	76990	9.62	92	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	294320	7.39	296345	7.39	99	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702048</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1702048-CAL6)				Lab File ID: 26JAN11.D			Analyzed: 01/26/17 18:02		
Pentafluorobenzene (IS)	209417	6.58	210237	6.59	100	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	67636	9.63	76990	9.62	88	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	306655	7.39	296345	7.39	103	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL4)				Lab File ID: 26JAN14.D			Analyzed: 01/26/17 19:12		
Pentafluorobenzene (IS)	210237	6.59	210237	6.59	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	76990	9.62	76990	9.62	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	296345	7.39	296345	7.39	100	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL7)				Lab File ID: 07FEB07.D			Analyzed: 02/07/17 09:30		
Pentafluorobenzene (IS)	198502	6.59	210237	6.59	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65644	9.62	76990	9.62	85	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	262651	7.39	296345	7.39	89	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL8)				Lab File ID: 07FEB08.D			Analyzed: 02/07/17 09:53		
Pentafluorobenzene (IS)	197084	6.59	210237	6.59	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66400	9.62	76990	9.62	86	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	256192	7.39	296345	7.39	86	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CAL9)				Lab File ID: 07FEB09.D			Analyzed: 02/07/17 10:17		
Pentafluorobenzene (IS)	199098	6.58	210237	6.59	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	66850	9.62	76990	9.62	87	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268584	7.39	296345	7.39	91	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CALA)				Lab File ID: 07FEB10.D			Analyzed: 02/07/17 10:40		
Pentafluorobenzene (IS)	189807	6.59	210237	6.59	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67543	9.63	76990	9.62	88	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	267711	7.39	296345	7.39	90	50 - 200	0.0000	+/-0.50	
Cal Standard (1702048-CALB)				Lab File ID: 07FEB11.D			Analyzed: 02/07/17 11:03		
Pentafluorobenzene (IS)	192292	6.58	210237	6.59	91	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64347	9.62	76990	9.62	84	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268075	7.39	296345	7.39	90	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Sequence: 1702048 Instrument: MS-V5

Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1702048-CALC)			Lab File ID: 07FEB12.D			Analyzed: 02/07/17 11:27			
Pentafluorobenzene (IS)	198987	6.58	210237	6.59	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68486	9.62	76990	9.62	89	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	272690	7.39	296345	7.39	92	50 - 200	0.0000	+/-0.50	



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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM

Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Sequence: 1702674 Instrument: MS-V5

Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (1702674-ICV1)			Lab File ID: 26JAN15.D			Analyzed: 01/26/17 19:35			
Pentafluorobenzene (IS)	213388	6.58	210237	6.59	101	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73774	9.62	76990	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	304652	7.39	296345	7.39	103	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1702674-ICB1)			Lab File ID: 26JAN17.D			Analyzed: 01/26/17 20:23			
Pentafluorobenzene (IS)	218750	6.59	213388	6.58	103	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72255	9.62	73774	9.62	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	295229	7.39	304652	7.39	97	50 - 200	0.0000	+/-0.50	
Initial Cal Check (1702674-ICV2)			Lab File ID: 07FEB15.D			Analyzed: 02/07/17 12:46			
Pentafluorobenzene (IS)	188542	6.59	210237	6.59	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65064	9.63	76990	9.62	85	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	259624	7.39	296345	7.39	88	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1702674-ICB2)			Lab File ID: 07FEB17.D			Analyzed: 02/07/17 13:33			
Pentafluorobenzene (IS)	199643	6.58	188542	6.59	106	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	66387	9.63	65064	9.63	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	275356	7.39	259624	7.39	106	50 - 200	0.0000	+/-0.50	
Calibration Check (1702674-CCV1)			Lab File ID: 14FEB59.D			Analyzed: 02/15/17 04:27			
Pentafluorobenzene (IS)	182270	6.58	210237	6.59	87	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	61637	9.62	76990	9.62	80	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	251264	7.39	296345	7.39	85	50 - 200	0.0000	+/-0.50	
Calibration Check (1702674-CCV2)			Lab File ID: 14FEB60.D			Analyzed: 02/15/17 04:49			
Pentafluorobenzene (IS)	189110	6.58	210237	6.59	90	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	58863	9.62	76990	9.62	76	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	249293	7.39	296345	7.39	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1702674-CCB1)			Lab File ID: 14FEB61.D			Analyzed: 02/15/17 05:12			
Pentafluorobenzene (IS)	192966	6.59	189110	6.58	102	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	57097	9.62	58863	9.62	97	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	254986	7.39	249293	7.39	102	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda

Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Sequence: 1702674 Instrument: MS-V5

Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B[B1276-BLK1)			Lab File ID: 15FEB01.D			Analyzed: 02/15/17 06:08			
Pentafluorobenzene (IS)	205452	6.59	189110	6.58	109	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	63140	9.62	58863	9.62	107	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	266657	7.39	249293	7.39	107	50 - 200	0.0000	+/-0.50	
DUP09_170208 (1703604-01)			Lab File ID: 15FEB02.D			Analyzed: 02/15/17 06:31			
Pentafluorobenzene (IS)	176661	6.58	189110	6.58	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	55925	9.62	58863	9.62	95	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	231989	7.39	249293	7.39	93	50 - 200	0.0000	+/-0.50	
M03-16_170208 (1703604-02)			Lab File ID: 15FEB03.D			Analyzed: 02/15/17 06:54			
Pentafluorobenzene (IS)	194144	6.58	189110	6.58	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	63892	9.62	58863	9.62	109	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	263908	7.39	249293	7.39	106	50 - 200	0.0000	+/-0.50	
S11-TT-MW04B_170208 (1703604-03)			Lab File ID: 15FEB04.D			Analyzed: 02/15/17 07:17			
Pentafluorobenzene (IS)	205252	6.58	189110	6.58	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	70362	9.62	58863	9.62	120	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	273349	7.39	249293	7.39	110	50 - 200	0.0000	+/-0.50	
S11-TT-MW04D_170208 (1703604-05)			Lab File ID: 15FEB06.D			Analyzed: 02/15/17 08:03			
Pentafluorobenzene (IS)	204767	6.58	189110	6.58	108	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69100	9.62	58863	9.62	117	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	272597	7.39	249293	7.39	109	50 - 200	0.0000	+/-0.50	
S11-TT-MW04E_170208 (1703604-06)			Lab File ID: 15FEB07.D			Analyzed: 02/15/17 08:27			
Pentafluorobenzene (IS)	207792	6.59	189110	6.58	110	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72348	9.62	58863	9.62	123	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	280835	7.39	249293	7.39	113	50 - 200	0.0000	+/-0.50	
S21-TT-MW02A_170208 (1703604-07)			Lab File ID: 15FEB08.D			Analyzed: 02/15/17 08:50			
Pentafluorobenzene (IS)	204637	6.59	189110	6.58	108	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64065	9.62	58863	9.62	109	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	257952	7.39	249293	7.39	103	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702674 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
S21-TT-MW02B_170208 (1703604-08) Lab File ID: 15FEB09.D Analyzed: 02/15/17 09:13									
Pentafluorobenzene (IS)	193455	6.58	189110	6.58	102	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65146	9.62	58863	9.62	111	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	259920	7.39	249293	7.39	104	50 - 200	0.0000	+/-0.50	
S21-TT-MW02D_170208 (1703604-10) Lab File ID: 15FEB11.D Analyzed: 02/15/17 09:59									
Pentafluorobenzene (IS)	203749	6.58	189110	6.58	108	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67103	9.62	58863	9.62	114	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	277794	7.39	249293	7.39	111	50 - 200	0.0000	+/-0.50	
DUP09_170208 (1703604-01RE1) Lab File ID: 15FEB12.D Analyzed: 02/15/17 10:22									
Pentafluorobenzene (IS)	198431	6.58	189110	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62633	9.62	58863	9.62	106	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	263060	7.39	249293	7.39	106	50 - 200	0.0000	+/-0.50	
M03-16_170208 (1703604-02RE1) Lab File ID: 15FEB13.D Analyzed: 02/15/17 10:46									
Pentafluorobenzene (IS)	205858	6.58	189110	6.58	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	64770	9.62	58863	9.62	110	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	267655	7.39	249293	7.39	107	50 - 200	0.0000	+/-0.50	
S11-TT-MW04C_170208 (1703604-04) Lab File ID: 15FEB14.D Analyzed: 02/15/17 11:09									
Pentafluorobenzene (IS)	178385	6.58	189110	6.58	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	58697	9.62	58863	9.62	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	249530	7.39	249293	7.39	100	50 - 200	0.0000	+/-0.50	
S21-TT-MW02C_170208 (1703604-09) Lab File ID: 15FEB15.D Analyzed: 02/15/17 11:32									
Pentafluorobenzene (IS)	200061	6.58	189110	6.58	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68960	9.62	58863	9.62	117	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	269978	7.39	249293	7.39	108	50 - 200	0.0000	+/-0.50	
S21-TT-MW02E_170208 (1703604-11) Lab File ID: 15FEB16.D Analyzed: 02/15/17 11:55									
Pentafluorobenzene (IS)	198900	6.58	189110	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62818	9.62	58863	9.62	107	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	269597	7.39	249293	7.39	108	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702674 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
S21-TT-MW03E_170208 (1703604-12) Lab File ID: 15FEB17.D Analyzed: 02/15/17 12:19									
Pentafluorobenzene (IS)	196635	6.58	189110	6.58	104	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66736	9.62	58863	9.62	113	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	262410	7.39	249293	7.39	105	50 - 200	0.0000	+/-0.50	
S11-TT-MW03B_170208 (1703604-13) Lab File ID: 15FEB18.D Analyzed: 02/15/17 12:42									
Pentafluorobenzene (IS)	196317	6.58	189110	6.58	104	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	59906	9.62	58863	9.62	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	250428	7.39	249293	7.39	100	50 - 200	0.0000	+/-0.50	
S11-TT-MW04B_170208 (1703604-03RE1) Lab File ID: 15FEB19.D Analyzed: 02/15/17 13:05									
Pentafluorobenzene (IS)	199074	6.58	189110	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	61763	9.62	58863	9.62	105	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	263755	7.39	249293	7.39	106	50 - 200	0.0000	+/-0.50	
S21-TT-MW02B_170208 (1703604-08RE1) Lab File ID: 15FEB21.D Analyzed: 02/15/17 13:51									
Pentafluorobenzene (IS)	199818	6.58	189110	6.58	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	63639	9.62	58863	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	266569	7.39	249293	7.39	107	50 - 200	0.0000	+/-0.50	
LCS (B B1276-BS1) Lab File ID: 15FEB22.D Analyzed: 02/15/17 14:15									
Pentafluorobenzene (IS)	193261	6.58	189110	6.58	102	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65645	9.62	58863	9.62	112	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	257345	7.39	249293	7.39	103	50 - 200	0.0000	+/-0.50	
Matrix Spike (B B1276-MS1) Lab File ID: 15FEB23.D Analyzed: 02/15/17 14:38									
Pentafluorobenzene (IS)	195464	6.58	189110	6.58	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71674	9.62	58863	9.62	122	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	274322	7.39	249293	7.39	110	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (B B1276-MSD1) Lab File ID: 15FEB24.D Analyzed: 02/15/17 15:01									
Pentafluorobenzene (IS)	199237	6.58	189110	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71929	9.62	58863	9.62	122	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	279069	7.39	249293	7.39	112	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702674 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (1702674-CCV3) Lab File ID: 15FEB27.D Analyzed: 02/15/17 16:10									
Pentafluorobenzene (IS)	207753	6.58	210237	6.59	99	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64152	9.62	76990	9.62	83	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	284093	7.39	296345	7.39	96	50 - 200	0.0000	+/-0.50	
Calibration Check (1702674-CCV4) Lab File ID: 15FEB28.D Analyzed: 02/15/17 16:34									
Pentafluorobenzene (IS)	199573	6.58	210237	6.59	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69554	9.62	76990	9.62	90	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	272515	7.39	296345	7.39	92	50 - 200	0.0000	+/-0.50	
Calibration Blank (1702674-CCB2) Lab File ID: 15FEB29.D Analyzed: 02/15/17 16:57									
Pentafluorobenzene (IS)	214832	6.58	199573	6.58	108	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66339	9.62	69554	9.62	95	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	283819	7.39	272515	7.39	104	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Sequence: 1702721 Instrument: MS-V5

Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (1702721-ICV1)					Lab File ID: 26JAN15.D	Analyzed: 01/26/17 19:35			
Pentafluorobenzene (IS)	213388	6.58	210237	6.59	101	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73774	9.62	76990	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	304652	7.39	296345	7.39	103	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1702721-ICB1)					Lab File ID: 26JAN17.D	Analyzed: 01/26/17 20:23			
Pentafluorobenzene (IS)	218750	6.59	213388	6.58	103	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72255	9.62	73774	9.62	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	295229	7.39	304652	7.39	97	50 - 200	0.0000	+/-0.50	
Initial Cal Check (1702721-ICV2)					Lab File ID: 07FEB15.D	Analyzed: 02/07/17 12:46			
Pentafluorobenzene (IS)	188542	6.59	210237	6.59	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65064	9.63	76990	9.62	85	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	259624	7.39	296345	7.39	88	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1702721-ICB2)					Lab File ID: 07FEB17.D	Analyzed: 02/07/17 13:33			
Pentafluorobenzene (IS)	199643	6.58	188542	6.59	106	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	66387	9.63	65064	9.63	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	275356	7.39	259624	7.39	106	50 - 200	0.0000	+/-0.50	
Calibration Check (1702721-CCV1)					Lab File ID: 16FEB03.D	Analyzed: 02/16/17 08:12			
Pentafluorobenzene (IS)	206508	6.58	210237	6.59	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	67427	9.62	76990	9.62	88	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	281807	7.39	296345	7.39	95	50 - 200	0.0000	+/-0.50	
Calibration Check (1702721-CCV2)					Lab File ID: 16FEB06.D	Analyzed: 02/16/17 09:21			
Pentafluorobenzene (IS)	192128	6.58	210237	6.59	91	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	61975	9.62	76990	9.62	80	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	249050	7.39	296345	7.39	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1702721-CCB1)					Lab File ID: 16FEB07.D	Analyzed: 02/16/17 09:45			
Pentafluorobenzene (IS)	192129	6.58	192128	6.58	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	57511	9.62	61975	9.62	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	242665	7.39	249050	7.39	97	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702721</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B B1418-BLK1)		Lab File ID: 16FEB08.D				Analyzed: 02/16/17 10:08			
Pentafluorobenzene (IS)	203668	6.58	192128	6.58	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	63580	9.62	61975	9.62	103	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	269967	7.39	249050	7.39	108	50 - 200	0.0000	+/-0.50	
S11-TT-MW03C_170208 (1703604-14)		Lab File ID: 16FEB09.D				Analyzed: 02/16/17 10:31			
Pentafluorobenzene (IS)	181164	6.58	192128	6.58	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	59962	9.62	61975	9.62	97	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	251300	7.39	249050	7.39	101	50 - 200	0.0000	+/-0.50	
S11-TT-MW03D_170208 (1703604-15)		Lab File ID: 16FEB10.D				Analyzed: 02/16/17 10:54			
Pentafluorobenzene (IS)	202392	6.58	192128	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	64246	9.62	61975	9.62	104	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	281010	7.39	249050	7.39	113	50 - 200	0.0000	+/-0.50	
S11-TT-MW03E_170208 (1703604-16)		Lab File ID: 16FEB11.D				Analyzed: 02/16/17 11:17			
Pentafluorobenzene (IS)	179769	6.58	192128	6.58	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	61252	9.62	61975	9.62	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	248503	7.39	249050	7.39	100	50 - 200	0.0000	+/-0.50	
S11-TT-MW04A_170208 (1703604-17)		Lab File ID: 16FEB12.D				Analyzed: 02/16/17 11:41			
Pentafluorobenzene (IS)	204857	6.58	192128	6.58	107	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66722	9.62	61975	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	267231	7.39	249050	7.39	107	50 - 200	0.0000	+/-0.50	
S11-TT-MW05D_170208 (1703604-18)		Lab File ID: 16FEB13.D				Analyzed: 02/16/17 12:04			
Pentafluorobenzene (IS)	208229	6.59	192128	6.58	108	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	66994	9.62	61975	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	285485	7.39	249050	7.39	115	50 - 200	0.0000	+/-0.50	
S11-TT-MW05E_170208 (1703604-19)		Lab File ID: 16FEB14.D				Analyzed: 02/16/17 12:27			
Pentafluorobenzene (IS)	213946	6.58	192128	6.58	111	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	70190	9.62	61975	9.62	113	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	277835	7.39	249050	7.39	112	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda

Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1702721</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1702011</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
S21-TT-MW03A_170208 (1703604-20)			Lab File ID: 16FEB15.D			Analyzed: 02/16/17 12:51			
Pentafluorobenzene (IS)	178465	6.58	192128	6.58	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	60556	9.62	61975	9.62	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	243000	7.39	249050	7.39	98	50 - 200	0.0000	+/-0.50	
S21-TT-MW03B_170208 (1703604-21)			Lab File ID: 16FEB16.D			Analyzed: 02/16/17 13:14			
Pentafluorobenzene (IS)	200108	6.59	192128	6.58	104	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	62996	9.62	61975	9.62	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	263085	7.39	249050	7.39	106	50 - 200	0.0000	+/-0.50	
S21-TT-MW03C_170208 (1703604-22)			Lab File ID: 16FEB17.D			Analyzed: 02/16/17 13:37			
Pentafluorobenzene (IS)	173880	6.58	192128	6.58	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	59552	9.62	61975	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	237785	7.39	249050	7.39	95	50 - 200	0.0000	+/-0.50	
S21-TT-MW03D_170208 (1703604-23)			Lab File ID: 16FEB18.D			Analyzed: 02/16/17 14:00			
Pentafluorobenzene (IS)	195849	6.58	192128	6.58	102	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	70798	9.62	61975	9.62	114	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	275108	7.39	249050	7.39	110	50 - 200	0.0000	+/-0.50	
TB16_170208 (1703604-24)			Lab File ID: 16FEB19.D			Analyzed: 02/16/17 14:23			
Pentafluorobenzene (IS)	184643	6.58	192128	6.58	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	57313	9.62	61975	9.62	92	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	241363	7.39	249050	7.39	97	50 - 200	0.0000	+/-0.50	
S21-TT-MW02A_170208 (1703604-07RE1)			Lab File ID: 16FEB20.D			Analyzed: 02/16/17 14:46			
Pentafluorobenzene (IS)	201223	6.58	192128	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	61656	9.62	61975	9.62	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268312	7.39	249050	7.39	108	50 - 200	0.0000	+/-0.50	
LCS (B B1418-BS1)			Lab File ID: 16FEB22.D			Analyzed: 02/16/17 15:33			
Pentafluorobenzene (IS)	202227	6.59	192128	6.58	105	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	65892	9.62	61975	9.62	106	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	272415	7.38	249050	7.39	109	50 - 200	-0.0100	+/-0.50	



AMEC Environmental & Infrastructure
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Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Sequence: 1702721 Instrument: MS-V5

Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike (B B1418-MS1) Lab File ID: 16FEB23.D Analyzed: 02/16/17 15:56									
Pentafluorobenzene (IS)	199055	6.59	192128	6.58	104	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69040	9.62	61975	9.62	111	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	275473	7.39	249050	7.39	111	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (B B1418-MSD1) Lab File ID: 16FEB24.D Analyzed: 02/16/17 16:19									
Pentafluorobenzene (IS)	186844	6.58	192128	6.58	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65385	9.62	61975	9.62	106	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	260158	7.39	249050	7.39	104	50 - 200	0.0000	+/-0.50	
S11-TT-MW04A_170208 (1703604-17RE1) Lab File ID: 16FEB26.D Analyzed: 02/16/17 17:05									
Pentafluorobenzene (IS)	213697	6.58	192128	6.58	111	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68470	9.62	61975	9.62	110	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	287760	7.39	249050	7.39	116	50 - 200	0.0000	+/-0.50	
EB30_170208 (1703604-25) Lab File ID: 16FEB27.D Analyzed: 02/16/17 17:28									
Pentafluorobenzene (IS)	221480	6.58	192128	6.58	115	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68879	9.62	61975	9.62	111	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	286067	7.39	249050	7.39	115	50 - 200	0.0000	+/-0.50	
EB31_170208 (1703604-26) Lab File ID: 16FEB28.D Analyzed: 02/16/17 17:51									
Pentafluorobenzene (IS)	221950	6.59	192128	6.58	116	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68231	9.62	61975	9.62	110	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	292678	7.39	249050	7.39	118	50 - 200	0.0000	+/-0.50	
EB32_170208 (1703604-27) Lab File ID: 16FEB29.D Analyzed: 02/16/17 18:14									
Pentafluorobenzene (IS)	221422	6.58	192128	6.58	115	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68601	9.62	61975	9.62	111	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	287277	7.39	249050	7.39	115	50 - 200	0.0000	+/-0.50	
S11-TT-MW03A_170208 (1703604-28) Lab File ID: 16FEB30.D Analyzed: 02/16/17 18:38									
Pentafluorobenzene (IS)	210072	6.58	192128	6.58	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69901	9.62	61975	9.62	113	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	281522	7.39	249050	7.39	113	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Sequence: 1702721 Instrument: MS-V5
Matrix: Water Calibration: 1702011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (1702721-CCV3) Lab File ID: 16FEB33.D Analyzed: 02/16/17 19:47									
Pentafluorobenzene (IS)	206787	6.58	210237	6.59	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68552	9.62	76990	9.62	89	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	265729	7.39	296345	7.39	90	50 - 200	0.0000	+/-0.50	
Calibration Check (1702721-CCV4) Lab File ID: 16FEB34.D Analyzed: 02/16/17 20:10									
Pentafluorobenzene (IS)	205701	6.58	210237	6.59	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68239	9.62	76990	9.62	89	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	274017	7.39	296345	7.39	92	50 - 200	0.0000	+/-0.50	
Calibration Blank (1702721-CCB2) Lab File ID: 16FEB35.D Analyzed: 02/16/17 20:33									
Pentafluorobenzene (IS)	216454	6.58	205701	6.58	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69297	9.62	68239	9.62	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	286235	7.39	274017	7.39	104	50 - 200	0.0000	+/-0.50	



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Project: Alameda
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INITIAL CALIBRATION STANDARDS EPA-8260B

Laboratory:	BC Laboratories	SDG:	1703604
Client:	AMEC Environmental & Infrastructure \$AMCN	Project:	Alameda
Sequence:	1702048	Instrument:	MS-V5
Calibration:	1702011		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
6J06023	8260 V5 BFB 50NG	1702048-TUN3	13DEC05.D	12/13/16 09:45
6L13070	8260 V5 1621865 TPPH IC1	1702048-CALD	13DEC06.D	12/13/16 10:10
6L13071	8260 V5 1621865 TPPH IC2	1702048-CALE	13DEC07.D	12/13/16 10:32
6L13072	8260 V5 1621865 TPPH IC3	1702048-CALF	13DEC08.D	12/13/16 10:55
6L13073	8260 V5 1621865 TPPH IC4	1702048-CALG	13DEC09.D	12/13/16 11:18
6L13074	8260 V5 1621865 TPPH IC5	1702048-CALH	13DEC10.D	12/13/16 11:41
6L13075	8260 V5 1621865 TPPH IC6	1702048-CALI	13DEC11.D	12/13/16 12:04
7A05057	8260 V5 BFB 25NG	1702048-TUN1	26JAN03.D	01/26/17 12:01
7A26048	8260 V5 1701474 IC1	1702048-CAL1	26JAN06.D	01/26/17 16:07
7A26049	8260 V5 1701474 IC2	1702048-CAL2	26JAN07.D	01/26/17 16:30
7A26050	8260 V5 1701474 IC3	1702048-CAL3	26JAN08.D	01/26/17 16:53
7A26052	8260 V5 1701474 IC5	1702048-CAL5	26JAN10.D	01/26/17 17:39
7A26053	8260 V5 1701474 IC6	1702048-CAL6	26JAN11.D	01/26/17 18:02
7A26051	8260 V5 1701474 IC4	1702048-CAL4	26JAN14.D	01/26/17 19:12
7A05057	8260 V5 BFB 25NG	1702048-TUN2	07FEB05.D	02/07/17 08:42
7B08028	8260 V5 1702048 XIC1	1702048-CAL7	07FEB07.D	02/07/17 09:30
7B08029	8260 V5 1702048 XIC2	1702048-CAL8	07FEB08.D	02/07/17 09:53
7B08030	8260 V5 1702048 XIC3	1702048-CAL9	07FEB09.D	02/07/17 10:17
7B08031	8260 V5 1702048 XIC4	1702048-CALA	07FEB10.D	02/07/17 10:40
7B08032	8260 V5 1702048 XIC5	1702048-CALB	07FEB11.D	02/07/17 11:03
7B08033	8260 V5 1702048 XIC6	1702048-CALC	07FEB12.D	02/07/17 11:27



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Benzene	0.5	2.001299	1	2.095124	10	1.998001	25	1.814919	50	1.805429	100	1.622498
Bromobenzene	0.5	1.235138	1	1.233305	10	1.314683	25	1.165975	50	1.096814	100	1.03003
Bromochloromethane	0.5	0.1425672	1	0.1325436	10	0.1711621	25	0.1646656	50	0.1627728	100	0.154593
Bromodichloromethane	0.5	0.3039686	1	0.3564123	10	0.3451298	25	0.3564332	50	0.3208134	100	0.2925043
Bromoform	0.5	0.2880288	1	0.2935321	10	0.3894204	25	0.3803455	50	0.3835852	100	0.3692516
Bromomethane	0.5	0.3263609	1	0.2894338	10	0.3174722	25	0.3148428	50	0.3352665	100	0.3246742
n-Butylbenzene	0.5	3.799186	1	3.935929	10	3.945626	25	3.241273	50	3.207154	100	2.832412
sec-Butylbenzene	0.5	6.128404	1	5.946271	10	5.702019	25	4.595516	50	4.524348	100	3.86744
tert-Butylbenzene	0.5	4.422263	1	4.154523	10	4.063275	25	3.618345	50	3.62728	100	3.227521
Carbon tetrachloride	0.5	0.5077027	1	0.4617677	10	0.4844907	25	0.4578262	50	0.4643785	100	0.4369645
Chlorobenzene	0.5	3.403415	1	3.032519	10	3.204125	25	2.822528	50	2.805949	100	2.599626
Chloroethane	0.5	0.3998238	1	0.4016734	10	0.4094729	25	0.3785956	50	0.3854055	100	0.3667295
Chloroform	0.5	0.7843921	1	0.7785005	10	0.807726	25	0.7485419	50	0.7363083	100	0.6736125
Chloromethane	0.5	0.8379683	1	0.7822706	10	0.7263955	25	0.5612485	50	0.6787272	100	0.6073041
2-Chlorotoluene	0.5	3.913108	1	4.135581	10	4.180331	25	3.40969	50	3.352137	100	3.005263
4-Chlorotoluene	0.5	3.679622	1	3.680004	10	3.650988	25	3.096584	50	3.016066	100	2.589454
Dibromochloromethane	0.5	0.1342072	1	0.1716034	10	0.182467	25	0.1914998	50	0.1804288	100	0.1648377
1,2-Dibromo-3-chloropropane	0.5	3.895912E-02	1	5.295468E-02	10	8.012157E-02	25	0.0787323	50	7.379204E-02	100	7.528387E-02
1,2-Dibromoethane	0.5	0.1336863	1	0.1367178	10	0.1480571	25	0.1507689	50	0.1407957	100	0.1240433
Dibromomethane	0.5	0.1271745	1	0.1174541	10	0.1114515	25	0.1179693	50	0.1072479	100	9.816732E-02
1,2-Dichlorobenzene	0.5	2.013515	1	1.889639	10	1.776988	25	1.627884	50	1.504987	100	1.346993
1,3-Dichlorobenzene	0.5	2.385104	1	2.233775	10	2.130371	25	1.857124	50	1.735571	100	1.491212
1,4-Dichlorobenzene	0.5	1.946344	1	2.30263	10	2.087517	25	1.848552	50	1.760416	100	1.551786
Dichlorodifluoromethane	0.5	0.5168742	1	0.5226796	10	0.485405	25	0.4207518	50	0.4655754	100	0.4479589
1,1-Dichloroethane	0.5	1.107756	1	1.088874	10	1.102973	25	0.9868425	50	0.9803533	100	0.9191498



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM

Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

INITIAL CALIBRATION DATA EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
1,2-Dichloroethane	0.5	0.4109931	1	0.4806181	10	0.4661897	25	0.4574951	50	0.4285013	100	0.3855169
1,1-Dichloroethene	0.5	0.822077	1	0.8447269	10	0.830404	25	0.7319283	50	0.7397421	100	0.6910743
cis-1,2-Dichloroethene	0.5	0.4787352	1	0.465674	10	0.49377	25	0.4738671	50	0.4573558	100	0.430678
trans-1,2-Dichloroethene	0.5	0.5134236	1	0.4547271	10	0.4717729	25	0.4184687	50	0.4370799	100	0.4061514
Total 1,2-Dichloroethene	1	0.4960794	2	0.4602006	20	0.4827714	50	0.4461679	100	0.4472179	200	0.4184147
1,2-Dichloropropane	0.5	0.3695419	1	0.4161093	10	0.3856841	25	0.3855479	50	0.3571677	100	0.3198885
1,3-Dichloropropane	0.5	0.2666562	1	0.2813996	10	0.2688449	25	0.2920285	50	0.2572662	100	0.234033
2,2-Dichloropropane	0.5	0.6856847	1	0.694105	10	0.685368	25	0.5958894	50	0.6303353	100	0.5857332
1,1-Dichloropropene	0.5	0.6661612	1	0.6603559	10	0.6514751	25	0.5887013	50	0.577937	100	0.5343898
cis-1,3-Dichloropropene	0.5	0.4324455	1	0.4859147	10	0.4515889	25	0.4616187	50	0.417184	100	0.3694562
trans-1,3-Dichloropropene	0.5	0.2934847	1	0.3018546	10	0.3177998	25	0.3282147	50	0.2922465	100	0.267436
Total 1,3-Dichloropropene	1	0.3629651	2	0.3938846	20	0.3846944	50	0.3949167	100	0.3547153	200	0.3184461
Ethylbenzene	0.5	1.998469	1	1.919642	10	1.822346	25	1.555085	50	1.559384	100	1.339764
Hexachlorobutadiene	0.5	0.8608622	1	0.9649365	10	0.8274984	25	0.6743993	50	0.7067595	100	0.7733293
Isopropylbenzene	0.5	5.541599	1	5.735282	10	5.562761	25	4.617893	50	4.485209	100	3.88485
p-Isopropyltoluene	0.5	4.370139	1	4.541797	10	4.403227	25	3.50592	50	3.503481	100	2.972745
Methylene chloride	0.5	1.380813	1	0.6020785	10	0.4907061	25	0.4037044	50	0.3786286	100	0.3527932
Methyl t-butyl ether	0.5	0.620576	1	0.5944021	10	0.6643339	25	0.6932177	50	0.6343534	100	0.5647101
Naphthalene	0.5	0.995204	1	0.996737	10	1.150575	25	1.26631	50	1.223878	100	1.343888
n-Propylbenzene	0.5	6.643739	1	6.607306	10	6.34069	25	5.187874	50	5.019322	100	4.296814
Styrene	0.5	2.962237	1	3.059481	10	3.303756	25	2.912087	50	2.761897	100	2.402163
1,1,1,2-Tetrachloroethane	0.5	1.045717	1	0.9335509	10	1.031739	25	0.8899909	50	0.8747263	100	0.7813369
1,1,2,2-Tetrachloroethane	0.5	0.4779881	1	0.5739292	10	0.6053115	25	0.5986648	50	0.5656142	100	0.514204
Tetrachloroethene	0.5	0.406138	1	0.3933741	10	0.3359388	25	0.3169185	50	0.3112157	100	0.283893
Toluene	0.5	0.8762214	1	0.8889887	10	0.7874331	25	0.7579031	50	0.7340921	100	0.6340213
1,2,3-Trichlorobenzene	0.5	1.0124	1	0.9600973	10	1.063608	25	1.029141	50	1.01769	100	1.068681



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2,4-Trichlorobenzene	0.5	1.113693	1	1.202472	10	1.312367	25	1.172028	50	1.14853	100	1.219963
1,1,1-Trichloroethane	0.5	0.6923136	1	0.6673965	10	0.6767841	25	0.6119399	50	0.6120982	100	0.5780424
1,1,2-Trichloroethane	0.5	0.1807662	1	0.141823	10	0.1556943	25	0.1617588	50	0.1464725	100	0.1333424
Trichloroethene	0.5	0.3552161	1	0.3431728	10	0.3314023	25	0.325283	50	0.3122907	100	0.2860576
Trichlorofluoromethane	0.5	0.6536298	1	0.6396432	10	0.5947437	25	0.5430728	50	0.5589381	100	0.5307153
1,2,3-Trichloropropane	0.5	6.824563E-02	1	9.885795E-02	10	0.1319488	25	0.1216781	50	0.1086731	100	0.1026184
1,1,2-Trichloro-1,2,2-trifluoroethan	0.5	0.4622083	1	0.4936999	10	0.4101976	25	0.3755476	50	0.3851518	100	0.3830124
1,2,4-Trimethylbenzene	0.5	4.004191	1	3.987501	10	4.061929	25	3.387905	50	3.272467	100	2.872534
1,3,5-Trimethylbenzene	0.5	4.453162	1	4.32265	10	4.183573	25	3.511978	50	3.38121	100	2.864052
Vinyl chloride	0.5	0.6796914	1	0.6803874	10	0.6002247	25	0.500264	50	0.5785057	100	0.5360639
Total Xylenes	1.5	2.24521	3	2.17529	30	2.169568	75	1.863115	150	1.843755	300	1.631824
Total Trihalomethanes	2	8219.5	4	8694	40	8729.6	100	8725.78	200	8143.66	400	7657.17
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether	2	9.966237E-02	4	0.1032701	40	0.1104221	100	0.1195954	200	0.1023104	400	9.026862E-02
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												



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Project Manager: Kelli Miller

INITIAL CALIBRATION DATA

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane	0.5	0.6636485	1	0.674308	10	0.8036327	25	0.7136875	50	0.7169495	100	0.6525504
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												



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INITIAL CALIBRATION DATA EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes	1	2.334995	2	2.206122	20	2.207287	50	1.86021	100	1.846253	200	1.615567
o-Xylene	0.5	2.065639	1	2.113624	10	2.094131	25	1.868923	50	1.838759	100	1.664337
Total Purgeable Petroleum Hydrocarbons												
1,2-Dichloroethane-d4 (Surrogate)	10	0.2973525	10	0.2996357	10	0.3100069	10	0.3141835	10	0.2929637	10	0.2610772
Toluene-d8 (Surrogate)	10	1.132547	10	1.15171	10	1.124811	10	1.157786	10	1.153517	10	1.108464
4-Bromofluorobenzene (Surrogate)	10	1.327082	10	1.358059	10	1.440958	10	1.403026	10	1.400549	10	1.344476



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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Benzene												
Bromobenzene												
Bromoform												
Bromochloromethane												
Bromodichloromethane												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												



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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Toluene												



AMEC Environmental & Infrastructure
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Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone	16	5.885331E-02	64	5.486477E-02	160	4.575636E-02	320	4.303549E-02	480	4.238974E-02	800	3.815865E-02
Acetonitrile	8	2.630956E-02	32	2.305172E-02	80	1.904401E-02	160	1.759122E-02	240	1.628795E-02	400	1.561949E-02
Acrolein	10	2.014086E-02	40	2.119655E-02	100	2.164562E-02	200	2.087963E-02	320	1.881822E-02	500	1.687929E-02
Acrylonitrile	4	6.314798E-02	16	6.407166E-02	40	6.566992E-02	80	6.695815E-02	128	6.401479E-02	200	5.844955E-02
Allyl chloride	1.6	1.246209	6.4	1.315699	16	1.051404	32	1.112253	48	1.013242	80	0.9476071
t-Amyl Alcohol	50	8.368681E-03	800	1.000823E-02	1250	1.074325E-02	2500	8.599915E-03	5000	8.577871E-03	10000	7.209516E-03
t-Amyl Methyl ether	0.8	0.7890978	3.2	0.7684858	8	0.6892523	16	0.7455567	24	0.6924863	40	0.6838185
Benzyl chloride	1.6	0.7442607	6.4	0.925193	16	0.8848822	32	0.8672207	48	0.9347496	80	0.8378464
t-Butyl alcohol	40	1.442177E-02	160	1.491686E-02	400	1.279973E-02	800	1.090766E-02	1200	1.097766E-02	2000	9.742395E-03
Carbon disulfide	1.6	1.43122	6.4	1.565917	16	1.28503	32	1.374396	48	1.250966	80	1.160933
2-Chloroethyl vinyl ether												
Chloroprene	1.6	1.052005	6.4	1.14178	16	0.9459726	32	1.015339	48	0.9445065	80	0.9060749



AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Chlorotrifluoroethene	0.5		8		12.5		25		50		100	
Cyclohexane	0.5	1.513133	8	1.14025	12.5	1.122121	25	1.141619	50	1.049253	100	0.978181
Cyclohexanone	20	4.801657E-02	80	5.026732E-02	200	4.903964E-02	400	3.924352E-02	640	0.0394305	1000	4.148994E-02
trans-1,4-Dichloro-2-butene	4	0.1390074	16	0.1734846	40	0.1540015	80	0.152377	120	0.1664349	200	0.1456137
1,2-Dichlorotrifluoroethane	0.5	0.600397	8	0.5858479	12.5	0.5631237	25	0.5863303	50	0.5569051	100	0.5084212
2,2-Dichloro-1,1,1-trifluoroethane	0.5	0.9930379	8	0.8988426	12.5	0.9032416	25	0.9175067	50	0.8494633	100	0.7593999
Diethyl ether	0.5	0.168764	8	0.2685847	12.5	0.2588715	25	0.2706454	50	0.2602594	100	0.2429581
Diisopropyl ether	0.8	0.3453366	3.2	0.3248456	8	0.2930466	16	0.3157978	24	0.3161555	40	0.3097464
1,4-Dioxane	100	8.646455E-04	400	8.345304E-04	1000	7.697778E-04	2000	6.080998E-04	3200	5.754803E-04	5000	6.211009E-04
Ethanol	200	1.961189E-03	800	1.782235E-03	2000	1.806949E-03	4000	1.342245E-03	6400	1.380193E-03	10000	0.0014058
Ethyl Amyl Ketone	0.5	0.2848699	8	0.3774285	12.5	0.401472	25	0.3713427	50	0.3908216	100	0.3433067
Ethyl methacrylate	4	0.1918515	16	0.2069249	40	0.1730604	80	0.1709325	120	0.1677136	200	0.1550915
Ethyl t-butyl ether	0.8	1.430653	3.2	1.466063	8	1.203704	16	1.304881	24	1.259166	40	1.202068
Hexachloroethane												
Hexane	0.5	0.5949562	8	0.5887845	12.5	0.6051452	25	0.6307923	50	0.5943815	100	0.5593928
2-Hexanone	16	0.1142652	64	0.1125322	160	9.156423E-02	320	8.783667E-02	480	8.119867E-02	800	6.678884E-02
Isobutanol	20	7.123354E-03	80	7.148602E-03	200	7.636189E-03	400	5.953416E-03	640	5.847877E-03	1000	5.458246E-03
Isopropyl alcohol	40	0.0104873	160	1.050187E-02	400	1.022373E-02	800	7.093126E-03	1280	7.063923E-03	2000	6.91995E-03
Methacrylonitrile	8	6.219711E-02	32	6.763931E-02	80	5.980472E-02	160	6.207918E-02	240	5.981788E-02	400	5.885384E-02
Methyl acetate	5	0.1573687	80	0.1495466	125	0.1512381	250	0.1460355	500	0.1424513	1000	0.1260794
Methylcyclohexane	0.5	0.7070219	8	0.6529624	12.5	0.6367468	25	0.6175689	50	0.5696085	100	0.5233474
Methyl ethyl ketone	8	0.1067181	32	9.618836E-02	80	8.350096E-02	160	8.184004E-02	240	8.202846E-02	400	0.0775675
5-Methyl-3-heptanone	1	0.4867162	16	0.508622	25	0.54838	50	0.4803251	100	0.4967023	200	0.3939813
Methyl iodide	1.6	0.5789929	6.4	0.6355158	16	0.5537757	32	0.609476	48	0.5838484	80	0.547304
Methyl isobutyl ketone	8	0.1497377	32	0.1713839	80	0.1389002	160	0.1345446	240	0.1270829	400	0.1119302



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Methyl methacrylate	4	8.801604E-02	16	9.652917E-02	40	7.997498E-02	80	7.903812E-02	120	7.863968E-02	200	7.818512E-02
Pentachloroethane	0.8	0.4423481	3.2	0.5834902	8	0.5450262	16	0.5418493	24	0.5844225	40	0.5225192
Propionitrile	20	0.0264355	80	2.570414E-02	200	2.384504E-02	400	2.216291E-02	640	2.125608E-02	1000	1.865313E-02
Tetrahydrofuran	16	5.908316E-02	64	5.764278E-02	160	4.946151E-02	320	4.948612E-02	480	0.0473374	800	4.534272E-02
Vinyl acetate	8	0.728072	32	0.7392454	80	0.5993619	160	0.6205669	240	0.584189	400	0.5349996
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydrocarbons												
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												



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INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												



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Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether												



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Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane												
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylecyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												



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Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydrocarbons	50	2.870791	500	3.087034	1000	3.029454	1500	3.069891	2000	2.877825	2500	2.932973
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												



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Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzene	1.889545	9.180943	6.94	5.634228E-03			15	
Bromobenzene	1.179324	8.781515	10.45	1.926087E-02			15	
Bromochloromethane	0.1547174	9.471048	6.183333	0.1673501			15	
Bromodichloromethane	0.3292103	8.362367	8.06	1.375235E-02			15	
Bromoform	0.3506939	13.37441	10.16	1.968264E-02			SPCC (0.10)	
Bromomethane	0.3180084	4.949792	2.436667	0.2126912			15	
n-Butylbenzene	3.493597	13.28005	11.23667	9.156336E-02			15	
sec-Butylbenzene	5.379312	14.19416	10.914	8.097688E-02			15	
tert-Butylbenzene	3.852201	11.35355	10.78333	5.100083E-02			15	
Carbon tetrachloride	0.4688551	5.191681	6.72	1.146183E-02			15	
Chlorobenzene	2.978027	9.870514	9.643333	4.988898E-02			SPCC (0.30)	
Chloroethane	0.3902835	4.138092	2.566667	0.2020673			15	
Chloroform	0.7548469	6.273066	6.331667	6.112167E-02			CCC (20)	
Chloromethane	0.6989857	14.97623	1.943333	0.2654085	0.99772		SPCC (0.10)	
2-Chlorotoluene	3.666018	13.06413	10.555	0.0536519			15	
4-Chlorotoluene	3.285453	13.86354	10.62667	4.983224E-02			15	
Dibromochloromethane	0.1708407	11.80164	9.241666	4.175574E-02			15	
1,2-Dibromo-3-chloropropane	0.0666406	25.17557	11.73833	8.312334E-02	0.99981		0.99	
1,2-Dibromoethane	0.1390115	7.054979	9.328333	4.188551E-02			15	
Dibromomethane	0.1132441	8.835653	7.91	1.653285E-02			15	
1,2-Dichlorobenzene	1.693334	14.65138	11.27833	8.752717E-02			15	
1,3-Dichlorobenzene	2.068389	12.94808	11.008	0.1004115			15	
1,4-Dichlorobenzene	1.916207	13.63312	11.065	7.433322E-02			15	
Dichlorodifluoromethane	0.4765408	8.332592	1.76	8.063699E-03			15	
1,1-Dichloroethane	1.030991	7.692112	5.058333	8.126204E-02			SPCC (0.10)	
1,2-Dichloroethane	0.438219	8.268656	7.005	7.754629E-02			15	



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604
Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda
Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1-Dichloroethene	0.7766588	8.198684	3.515	0.1557692			CCC (20)	
cis-1,2-Dichloroethene	0.46668	4.610702	5.831667	0.1294296			15	
trans-1,2-Dichloroethene	0.4502706	8.659956	4.501667	0.0902417			15	
Total 1,2-Dichloroethene	0.4584753	6.08411	5.831667	0.1294296			15	
1,2-Dichloropropane	0.3723232	8.709297	7.84	9.702376E-03			CCC (20)	
1,3-Dichloropropane	0.2667047	7.533232	9.09	0.0186287			15	
2,2-Dichloropropane	0.6461859	7.526579	5.84	0.1091096			15	
1,1-Dichloropropene	0.61317	8.797094	6.726667	7.685787E-02			15	
cis-1,3-Dichloropropene	0.436368	9.271827	8.408333	4.530242E-02			15	
trans-1,3-Dichloropropene	0.3001727	7.112617	8.83	2.384445E-02			15	
Total 1,3-Dichloropropene	0.3682704	7.991017	8.83	2.384445E-02			15	
Ethylbenzene	1.699115	14.95483	9.698333	4.299496E-02			CCC (20)	
Hexachlorobutadiene	0.8012975	13.30544	12.28833	0.1407559			15	
Isopropylbenzene	5.188549	11.33656	10.24	0.015589			15	
p-Isopropyltoluene	4.064913	12.68025	10.998	7.728538E-02			15	
Methylene chloride	0.601454	65.25738	4.151667	9.579772E-02	0.99908		0.99	
Methyl t-butyl ether	0.6285989	7.393993	4.491666	8.862136E-02			15	
Naphthalene	1.162765	12.34674	12.385	0.1128744			15	
n-Propylbenzene	5.959786	13.29814	10.488	3.977509E-02			15	
Styrene	2.90027	10.45117	10.03167	3.567744E-02			15	
1,1,1,2-Tetrachloroethane	0.9261768	10.84263	9.698333	4.299496E-02			15	
1,1,2,2-Tetrachloroethane	0.555952	8.993065	10.42	9.595757E-03			SPCC (0.30)	
Tetrachloroethene	0.3412463	14.19945	9.038333	3.957867E-02			15	
Toluene	0.7797766	12.17928	8.661667	0.04731			CCC (20)	
1,2,3-Trichlorobenzene	1.02527	3.862187	12.51667	0.1652262			15	
1,2,4-Trichlorobenzene	1.194842	5.768365	12.22	0.1261601			15	



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.6397625	7.075288	6.528334	6.356984E-02			15	
1,1,2-Trichloroethane	0.1533095	10.94703	8.978333	0.0413948			15	
Trichloroethene	0.3255704	7.473897	7.605	0.0716509			15	
Trichlorofluoromethane	0.5867905	8.741507	2.868333	0.1427778			15	
1,2,3-Trichloropropane	0.105337	20.84859	10.46167	3.519845E-02	0.99859		0.99	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4183029	11.63839	3.535	0.154669			15	
1,2,4-Trimethylbenzene	3.597754	13.66403	10.81667	4.928939E-02			15	
1,3,5-Trimethylbenzene	3.970515	12.33762	10.588	4.151475E-02			15	
Vinyl chloride	0.5958562	12.3798	2.07	5.801038E-03			CCC (20)	
Total Xylenes	1.988127	12.26843	10.02	0.0198293			15	
Total Trihalomethanes	8361.618	5.192236	10.16	1.968264E-02			15	
Acetone	0.044841	13.89285	3.566	0.1535831			15	
Acetonitrile	1.965066E-02	21.35825	3.915	0.1394718	0.99895		0.99	
Acrolein	0.0199267	8.98742	3.396667	0.2401525			15	
Acrylonitrile	6.371868E-02	4.581122	4.443333	0.1152199			15	
Allyl chloride	1.114402	12.68532	3.991667	0.1026915			15	
t-Amyl Alcohol	8.917911E-03	14.14637	6.971666	6.115328E-02			15	
t-Amyl Methyl ether	0.7281162	6.262118	7.09	1.844497E-02			15	
Benzyl chloride	0.8656921	8.036501	11.1	1.307304E-02			15	
t-Butyl alcohol	1.280474E-02	14.61721	4.276	0.2100331			15	
Carbon disulfide	1.344744	10.69499	3.8	0.1664058			15	
2-Chloroethyl vinyl ether	0.1042548	9.542111	8.283333	6.161591E-02			15	
Chloroprene	1.000946	8.693085	5.151667	7.949544E-02			15	
Chlorotrifluoroethene							15	
Cyclohexane	1.086285	6.560645	6.622	6.679619E-02			15	
Cyclohexanone	4.458125E-02	11.37529	10.3	2.077223E-03			15	



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EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>1703604</u>
Client:	<u>AMEC Environmental & Infrastructure \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1702011</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>01/26/17 17:00</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
trans-1,4-Dichloro-2-butene	0.1551532	8.274238	10.43167	3.686923E-02			15	
1,2-Dichlorotrifluoroethane	0.5668375	5.793663	3.3	1.804918E-02			15	
2,2-Dichloro-1,1,1-trifluoroethane	0.8869153	8.772737	3.391667	0.1202184			15	
Diethyl ether	0.2602638	4.202131	3.22	2.166916E-02			15	
Diisopropyl ether	0.3174881	5.440254	5.103333	9.952656E-02			15	
1,4-Dioxane	7.122724E-04	17.68626	7.9	0.1123963	0.99707		0.99	
Ethanol	1.543484E-03	14.9342	3.09	0.7928208			15	
Ethyl Amyl Ketone	0.3615402	11.74224	10.76	1.356797E-02			15	
Ethyl methacrylate	0.1775957	10.48137	8.86	1.624233E-02			15	
Ethyl t-butyl ether	1.311089	8.660484	5.591667	7.395801E-02			15	
Hexachloroethane	0.7041294	7.867683	11.45	0.0960662			15	
Hexane	0.5955754	3.893747	4.861667	8.576904E-02			15	
2-Hexanone	0.0923643	19.88289	9.103333	0.0561633		0.9995528	0.99	
Isobutanol	6.527947E-03	13.53742	6.845	0.1220592			15	
Isopropyl alcohol	8.714983E-03	21.27518	3.753333	0.575574	0.99615		0.99	
Methacrylonitrile	6.173201E-02	5.168261	6.13	1.714861E-02			15	
Methyl acetate	0.1454533	7.384817	3.973333	0.2059519			15	
Methylcyclohexane	0.617876	10.4386	7.815	6.776742E-02			15	
Methyl ethyl ketone	0.0879739	12.65874	5.813333	8.944584E-02			15	
5-Methyl-3-heptanone	0.4857878	10.50343	10.44	2.779896E-03			15	
Methyl iodide	0.5848188	5.714397	3.705	0.1477932			15	
Methyl isobutyl ketone	0.1389299	14.60526	8.51	1.340775E-02			15	
Methyl methacrylate	8.339718E-02	8.88122	7.88	9.924249E-03			15	
Pentachloroethane	0.5366092	9.742643	10.8	1.727045E-02			15	
Propionitrile	2.300947E-02	12.66567	5.898333	0.1266948			15	
Tetrahydrofuran	5.139228E-02	10.95959	6.196667	8.478846E-02			15	



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EPA-8260B

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Calibration: 1702011 Instrument: MS-V5
Matrix: Water Calibration Date: 01/26/17 17:00

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Vinyl acetate	0.6344058	12.91925	5.063333	0.1028759			15	
p- & m-Xylenes	2.011739	13.84385	9.78	1.957201E-02			15	
o-Xylene	1.940902	9.244618	10.02	0.0198293			15	
Total Purgeable Petroleum Hydrocarbons	2.977995	3.239537	9.668333	4.855941			15	
1,2-Dichloroethane-d4 (Surrogate)	0.2958699	6.360265	6.921667	6.116163E-02			15	
Toluene-d8 (Surrogate)	1.138139	1.710998	8.61	0.0142186			15	
4-Bromofluorobenzene (Surrogate)	1.379025	3.111593	10.355	4.975555E-02			15	



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HOLDING TIME SUMMARY

EPA-8260B

Laboratory: BC Laboratories SDG: 1703604

Client: AMEC Environmental & Infrastructure \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
DUP09_170208	02/08/17 09:35	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 06:31	7.00	14.00	
DUP09_170208	02/08/17 09:35	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 10:22	7.00	14.00	
M03-16_170208	02/08/17 10:05	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 06:54	7.00	14.00	
M03-16_170208	02/08/17 10:05	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 10:46	7.00	14.00	
S11-TT-MW04B_170208	02/08/17 11:15	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 07:17	7.00	14.00	
S11-TT-MW04B_170208	02/08/17 11:15	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 13:05	7.00	14.00	
S11-TT-MW04C_170208	02/08/17 10:35	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 11:09	7.00	14.00	
S11-TT-MW04D_170208	02/08/17 09:40	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 08:03	7.00	14.00	
S11-TT-MW04E_170208	02/08/17 08:45	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 08:27	7.00	14.00	
S21-TT-MW02A_170208	02/08/17 09:52	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 08:50	7.00	14.00	
S21-TT-MW02A_170208	02/08/17 09:52	02/08/17 22:30	02/16/17 06:00	8.00	14.00	02/16/17 14:46	8.00	14.00	
S21-TT-MW02B_170208	02/08/17 09:29	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 09:13	7.00	14.00	
S21-TT-MW02B_170208	02/08/17 09:29	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 13:51	7.00	14.00	
S21-TT-MW02C_170208	02/08/17 09:00	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 11:32	7.00	14.00	
S21-TT-MW02D_170208	02/08/17 08:34	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 09:59	7.00	14.00	
S21-TT-MW02E_170208	02/08/17 08:05	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 11:55	7.00	14.00	
S21-TT-MW03E_170208	02/08/17 10:51	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 12:19	7.00	14.00	
S11-TT-MW03B_170208	02/08/17 13:35	02/08/17 22:30	02/15/17 06:00	7.00	14.00	02/15/17 12:42	7.00	14.00	
S11-TT-MW03C_170208	02/08/17 13:05	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 10:31	8.00	14.00	



AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 3:40:25PM

Project: Alameda

Project Number: 5023146096

Project Manager: Kelli Miller

S11-TT-MW03D_170208	02/08/17 12:25	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 10:54	8.00	14.00	
S11-TT-MW03E_170208	02/08/17 11:35	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 11:17	8.00	14.00	
S11-TT-MW04A_170208	02/08/17 12:15	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 11:41	8.00	14.00	
S11-TT-MW04A_170208	02/08/17 12:15	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 17:05	8.00	14.00	
S11-TT-MW05D_170208	02/08/17 13:40	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 12:04	8.00	14.00	
S11-TT-MW05E_170208	02/08/17 12:55	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 12:27	8.00	14.00	
S21-TT-MW03A_170208	02/08/17 13:43	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 12:51	8.00	14.00	
S21-TT-MW03B_170208	02/08/17 11:51	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 13:14	8.00	14.00	
S21-TT-MW03C_170208	02/08/17 13:16	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 13:37	8.00	14.00	
S21-TT-MW03D_170208	02/08/17 11:18	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 14:00	8.00	14.00	
TB16_170208	02/08/17 12:15	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 14:23	8.00	14.00	
EB30_170208	02/08/17 14:10	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 17:28	8.00	14.00	
EB31_170208	02/08/17 14:20	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 17:51	8.00	14.00	
EB32_170208	02/08/17 14:30	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 18:14	8.00	14.00	
S11-TT-MW03A_170208	02/08/17 14:15	02/08/17 22:30	02/16/17 07:00	8.00	14.00	02/16/17 18:38	8.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



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Project Manager: Kelli Miller

Notes and Definitions

B	Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
D	The reported value is from a dilution.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
J	The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
U	The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.